



Physical Activity Guidelines for Americans Midcourse Report

# Implementation Strategies for Older Adults











#### Message from the Assistant Secretary for Health

As older adults continue to make up a growing share of the U.S. population, physical activity is a vital tool for helping them manage and improve their health. However, less than 15 percent of Americans age 65 years and older get the recommended amounts of aerobic and muscle-strengthening physical activity outlined in the second edition of the Physical Activity Guidelines for Americans.

Regular physical activity is one of the most important things people can do to improve their health. This is especially true for older adults, many of whom live with 1 or more chronic conditions. In fact, regular physical activity can help people prevent or manage many costly chronic conditions that are common in older adults, including heart disease and stroke, cancer, diabetes, obesity, and arthritis — and physical activity is also associated with a host of other physical, mental, social, and economic benefits.

To help reverse the observed rates of inactivity among this population, the U.S. Department of Health and Human Services (HHS) is pleased to share the Physical Activity Guidelines for Americans Midcourse Report: Implementation Strategies for Older Adults (Midcourse Report). The National Strategy on Hunger, Nutrition, and Health specifically called for this report after the historic conference in September 2022. Summarizing evidence-based strategies to increase physical activity among older adults directly supports Pillar 4: Support Physical Activity for All.

The Midcourse Report extends the work of the Physical Activity Guidelines and provides the "how" to help older adults achieve the recommended 150 minutes or more of moderate-intensity aerobic physical activity and 2 days of muscle-strengthening physical activity each week. The report was informed by a systematic literature review with support from federal experts in physical activity as well as the President's Council on Sports, Fitness & Nutrition Science Board. The report provides an overview of evidence-based strategies to increase physical activity among older adults in key settings and reinforces the message that older adults should try to move more, sit less each day, and engage in a variety of activities.

Promoting physical activity is not just an individual responsibility. Everyone has a role to play. This report is for policymakers; exercise and health professionals; clinicians; gerontologists; built environment professionals; local, state, territorial, and Tribal leaders; and others working with older adults. It's a guide to help these groups implement individual- and community-level strategies that support physical activity among older adults. Resources are also available to help guide and sustain the activities listed in this guide. One such resource is the HHS Move Your Way<sup>®</sup> campaign, which provides materials and tools to encourage people of all ages to meet recommendations from the Physical Activity Guidelines. Another is the Centers for Disease Control and Prevention's Active People, Healthy Nation<sup>SM</sup> initiative, which provides an evidence-based blueprint to help 27 million Americans become more physically active by 2027.

Helping older adults become more active will require comprehensive and coordinated strategies. I am pleased to provide this *Midcourse Report* as a resource to support families, caregivers, community groups, nonprofits, health care providers, and all forms of government in our collective effort toward creating healthy people, healthy communities, and a healthy nation for all.

#### Rachel L. Levine, M.D.

Admiral, U.S. Public Health Service Assistant Secretary for Health

# Acknowledgments

The U.S. Department of Health and Human Services (HHS) would like to recognize the efforts of federal staff who oversaw the development of the Physical Activity Guidelines for Americans Midcourse Report: Implementation Strategies for Older Adults.

# **Core Writing Team** Office of the Assistant Secretary for Health, Office of Disease Prevention and Health Promotion

- Katrina L. Piercy, PhD, RD, ACSM-CEP, FACSM, federal lead
- Alison Vaux-Bjerke, MPH, MCHES
- Malorie Polster, MPH, CHES
- Bianca Macias, MPH, CPH

# **Federal Writing Team**

# Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity, Obesity

- Ken Rose, MPA
- David R. Brown, PhD, FACSM
- Geoffrey P. Whitfield, PhD, MEd
- Christina Dahlstrom, MPH
- Graycie Soto, MPH

# National Institutes of Health

#### **National Cancer Institute**

- Dana L. Wolff-Hughes, PhD
- Richard P. Troiano, PhD

#### National Institute on Aging

Lyndon Joseph, PhD

#### National Institute of Arthritis and Musculoskeletal and Skin Diseases

Stephanie M. George, PhD, MPH, MA

#### **Clinical Center, Rehabilitation Medicine**

Adrienne Jackson, PT, PhD, MPA

## Office of the Assistant Secretary for Health, Office of the Surgeon General

Noelle Harada, MPH

# **Federal Committee**

The Office of Disease Prevention and Health Promotion led monthly meetings with the Physical Activity Guidelines Midcourse Report Federal Committee to provide status updates and gather input. Members represented the following agencies:

- Office of the Assistant Secretary for Health
  - Office of Disease Prevention and Health Promotion (President's Council on Sports, Fitness & Nutrition)
  - Office on Women's Health
- Administration for Community Living
- Centers for Disease Control and Prevention
  - Division of Nutrition, Physical Activity, Obesity
  - Division of Diabetes Translation
  - Division of Population Health
- Department of Defense, Office of Military Family Readiness Policy, Office of Military Community and Family Policy
- National Institutes of Health, National Cancer Institute
- Office of the Assistant Secretary for Planning and Evaluation
- Office of the Assistant Secretary for Financial Resources

HHS gratefully acknowledges the work of the 2022 President's Council on Sports, Fitness & Nutrition Science Board, which supported the scientific literature review on physical activity and health summarized in the Physical Activity and Older Adults Systematic Literature Review. The Science Board consisted of the following individuals: Barbara J. Nicklas, PhD (chair); Susan W. Buchholz, PhD, RN, ANP-BC, FAANP, FAAN; David E. Conroy, PhD, FACSM, FSBM; Cheryl Der Ananian, PhD; Loretta DiPietro, PhD, MPH, FACSM; Mark Fenton, MS; Deborah H. John, PhD, MS; NiCole R. Keith, PhD, FACSM, FNAK; David X. Marquez, PhD, FNAK, FACSM, FSBM, FGSA; Jacqueline Osborne, DPT; and Dori Rosenberg, PhD, MPH.

HHS acknowledges the contributions of the external peer reviewers - Susan W. Buchholz, PhD, RN, ANP-BC, FAANP, FAAN; David M. Buchner, MD, MPH; David E. Conroy, PhD, FACSM, FSBM; Mark Fenton, MS; Barbara J. Nicklas, PhD; and Jacqueline Osborne, DPT; departmental scientists, staff, and policy officials; and members of the public who reviewed the draft report and provided helpful comments.

# **Table of Contents**

Acknowledgments	3
Table of Contents	5
Executive Summary	6
Key Findings	6
Taking Action: Everyone Has a Role to Play	7
Introduction	8
Developing the Midcourse Report	
Meeting the Physical Activity Guidelines	
Benefits of Physical Activity	
Barriers to Physical Activity	
What Works: Key Strategies	22
Policy, Systems, and Environmental Approaches	
Behavior Change	
Physical Activity Programs	
Where It Works: Key Settings	37
Community	
Health Care	
Home	
Everyone Has a Role to Play in Helping Older Adults Be Physically Active	47
Conclusion	50
Glossary	51
Appendix: Federally Supported Physical Activity Initiatives and Resources for Older Adults	54

**Suggested citation:** U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans Midcourse Report: Implementation Strategies for Older Adults. Washington, DC: U.S. Department of Health and Human Services; 2023

# **Executive Summary**

The benefits of regular physical activity occur throughout life and are essential for healthy aging. Despite this, less than 15 percent of older adults age 65 years and older meet the aerobic and muscle-strengthening activity recommendations set forth in the second edition of the Physical Activity Guidelines for Americans. Furthermore, physical activity levels often decrease as adults get older. The Physical Activity Guidelines for Americans Midcourse Report: Implementation Strategies for Older Adults (Midcourse Report) reinforces the amounts and types of physical activity Americans need, as outlined in the Guidelines, and highlights effective strategies for increasing physical activity. Older adults were selected for this report because they are an expanding population with low rates of physical activity and because of the physical, mental, social, and economic benefits of physical activity for older adults.

Many older adults face barriers to getting or staying physically active. These barriers often relate to older adults' capabilities, opportunities, or motivation. Understanding the different barriers older adults face is key to delivering effective and equitable interventions.

- Capability-related barriers include individual attributes such as chronic health conditions, physical or cognitive limitations, and pain.
- Opportunity-related barriers include external factors such as social isolation; inequitable access to spaces, equipment, or guidance; neighborhood environment characteristics like low-quality sidewalks or poor lighting; and environmental limitations like climate-related issues.
- Motivation-related barriers include personal attitudes and beliefs, such as the perception that it is too late to start being active; fear of falling, pain, or injury; low self-efficacy, knowledge, and awareness; or lack of enjoyment. Insufficient social support and societal biases related to age can exacerbate motivation-related barriers.

The primary audiences for the Midcourse Report are policymakers; exercise and health professionals; clinicians; gerontologists; built environment professionals; local, state, territorial, and Tribal leaders; and others working with older adults. The Midcourse Report summarizes strategies that these audiences can use in key settings to increase physical activity among older adults and to reinforce the message that people can begin or restart physical activity at any age.

# **Key Findings**

This report highlights a variety of strategies that can be implemented wherever older adults spend their time, including community, health care, and home settings. These strategies include policy, systems, and environmental approaches; behavior change; and physical activity programs.

#### Policy, Systems, and Environmental Approaches

Community Design

#### **Behavior Change**

- Cognitive Behavioral Strategies
- Physical Activity Counseling

#### **Physical Activity Programs**

- Exercise Programs
- Lifestyle-Based Physical Activity Programs

# Taking Action: Everyone Has a Role to Play

Everyone has a role to play in increasing physical activity levels among older adults and encouraging progress toward meeting the Physical Activity Guidelines. People in different sectors — including education; government; health care; housing; land use and community design; nonprofit; parks, recreation, and green space; public health; sports and fitness; and transportation — can all be involved in these efforts.

**Professionals working with older adults one-on-one or in small-group settings** are in key positions to support and encourage them to increase their physical activity levels through direct interactions and services.

• Examples: exercise and health professionals; clinicians; gerontologists

**Organizations** are uniquely positioned to create conditions for older adults to participate in physical activity through programming and interactions at various facilities and locations.

 Examples: community, senior, or Tribal centers; health and fitness centers; cardiac rehabilitation facilities; hospital lifestyle and wellness centers; parks and recreation departments; faith-based institutions; senior living residences

**Community** includes the design and atmosphere of public spaces that people can use for physical activity, such as active transportation and public transit infrastructure; parks, greenways, and trails; and other community design interventions.

• Examples: civic associations; housing authorities; those involved in public works, urban planning, parks and recreation, transportation, and economic development

**Policymakers and decision-makers** are responsible for creating laws, rules, regulations, codes, and funding at various levels of government; corporate policies; and institutional rules and policies. These can all support and promote more physical activity for older adults.

• Examples: local and state government officials; Tribal leaders; public facility management, including schools and parks; health system administrators; health insurance companies

When it comes to physical activity, something is always better than nothing, and it's important to help older adults find enjoyable and sustainable ways to build physical activity into their lifestyle. This report summarizes effective strategies for helping to increase physical activity levels among older adults. Whether an older adult is exceeding the key guidelines or just trying to move a little more each day, any increase in physical activity is positive and can help move the needle to improve their health and well-being.

# Introduction

Through the Physical Activity Guidelines for Americans, its associated Move Your Way® communication campaign, and the Active People, Healthy Nation<sup>SM</sup> initiative, the U.S. Department of Health and Human Services (HHS) is working to create a culture of health where all Americans can live active, healthy lives. The Physical Activity Guidelines for Americans (referred to throughout this report as the Guidelines) emphasizes why people need to engage in physical activity and what dose of physical activity they need for health benefits. The Physical Activity Guidelines for Americans for Americans Midcourse Report: Implementation Strategies for Older Adults (Midcourse Report) focuses on how and where to do physical activity and reinforces the amounts and types of physical activity for older adults in a variety of settings. HHS releases a midcourse report every 10 years between Guidelines updates. In 2013, HHS highlighted youth in the Physical Activity Guidelines for Americans Midcourse Report: Strategies to Increase Physical Activity Among Youth.

Older adults were selected for this report because they are an expanding population with low rates of physical activity and because of the physical, mental, social, and economic benefits of physical activity for older adults. Promoting physical activity and reducing sedentary behavior in older adults is especially important because this population is the least physically active of any age group and most older adults spend a significant portion of their day engaging in sedentary behavior. By the year 2030, 1 in every 5 Americans will be age 65 or older and currently, less than 15 percent of older adults meet the aerobic and muscle-strengthening physical activity

# Defining Older Adults for This Report

Older adults are people age 65 years and older. This age range is consistent with the definition of older adults used in the Physical Activity Guidelines for Americans and for Healthy People objectives. In the United States, age 65 is the threshold for Medicare eligibility.

recommendations in the Guidelines. Older adults are more likely to have chronic diseases and mobility challenges requiring medical care as well as higher health care costs. Physically active older adults live longer on average than inactive older adults. In addition, physical activity may allow older adults to live independently longer, be healthier, have better quality of life, and need less medical care. It can also help older individuals maintain or improve their health and manage or prevent progression of chronic conditions. As the older adult population is growing, physical activity can also be an important contributing factor in improving population health and reducing health care costs.

Physical activity can benefit people at any stage of life, and its benefits are essential for healthy aging. Physical activity can improve physical function in adults of any age and ability, adults who are overweight or have obesity, adults with chronic conditions, and even those with frailty. Older adults gain substantial health benefits from regular physical activity, and it's never too late to start. Being physically active makes it easier to perform activities of daily living — including eating, bathing, toileting, dressing, getting into or out of a bed or chair, and moving around the house or neighborhood. Older adults are

at higher risk for falls and fall-related injuries. However, physically active older adults are less likely to fall than their sedentary counterparts, and if they do fall, they're less likely to be seriously injured. Physical activity can also preserve physical function and mobility, which may help maintain independence and delay the onset of major disability. Additionally, over 85 percent of older adults have 1 or more chronic conditions. Physical activity has been shown to help prevent or slow the progression of many chronic conditions common among older adults — such as type 2 diabetes, cardiovascular disease, osteoarthritis, obesity, certain types of cancer, and dementias including Alzheimer's disease.

Older adults are a varied group with a wide range of functional capabilities and health conditions. They are also at different life stages, with some still actively working and others retired and potentially living a very sedentary lifestyle. All adults experience a loss of physical function with age — but some more than others. This diversity means that some older adults can run several miles, while others struggle to walk to the mailbox or the bathroom. Even small amounts of physical activity can improve physical function and health for people with limited functional capabilities. For older adults who are inactive, replacing sedentary behavior with light-intensity physical activity can be a beneficial first step.

Physical activity has been shown to help prevent or slow the progression of many chronic conditions common among older adults — such as type 2 diabetes, cardiovascular disease, osteoarthritis, obesity, certain types of cancer, and dementias including Alzheimer's disease.

Regardless of their functional capabilities, older adults benefit

from aerobic, muscle-strengthening, and multicomponent (mix of aerobic, muscle-strengthening, and balance) activities. Although almost 37 percent of older adults meet the aerobic recommendation in the Guidelines, only 19 percent meet the muscle-strengthening recommendation. Muscle-strengthening activities are key to helping older adults maintain their strength and slow the progression of muscle mass loss (sarcopenia) as they age, making it easier to perform daily tasks. In addition to improving physical function, muscle-strengthening activities — often in combination with balance training — are key to reducing the risk of falls and fall-related injuries. This report summarizes strategies that policymakers; exercise and health professionals; clinicians; gerontologists; built environment professionals; local, state, territorial, and Tribal leaders; and others working with older adults can use to support increased physical activity among older adults and to reinforce the message that people can begin or restart physical activity at any age.



# The Cost of Inactivity

Among all age groups, older adults have the lowest rates of meeting the recommendations in the Guidelines, and they also have the highest health care costs.

#### Worldwide:

 The World Health Organization (WHO) predicts that physical inactivity will be responsible for \$27 billion in direct health care costs annually (not factoring in productivity losses) between 2020 and 2030.<sup>1</sup>

#### In the United States:

- Personal health care spending for adults age 65 years and older was \$19,098 per person in 2014 over 5 times higher than spending for children ages 0 to 18 years (\$3,749 per person) and almost 3 times the spending for adults ages 19 to 64 years (\$7,153 per person).<sup>2</sup>
- Regular physical activity can help people prevent or manage many costly chronic conditions that are common in older adults, including heart disease and stroke, cancer, diabetes, obesity, and arthritis.<sup>3</sup>
- Approximately 10 percent of deaths among adults ages 40 to 69 years and 7.8 percent of deaths among adults age 70 years and older are attributed to individuals not meeting the aerobic physical activity Guidelines.<sup>4</sup>

#### References

- 1. WHO highlights high cost of physical inactivity in first-ever global report. World Health Organization. <u>https://www.who.int/</u> <u>news/item/19-10-2022-who-highlights-high-cost-of-physical-inactivity-in-first-ever-global-report</u>. Published October 19, 2022. Accessed January 24, 2023.
- 2. NHE fact sheet. CMS. <u>https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/</u> <u>nationalhealthexpenddata/nhe-fact-sheet</u>. Published December 14, 2022. Accessed January 24, 2023.
- 3. Health and Economic Costs of Chronic Diseases. Centers for Disease Control and Prevention. <u>https://www.cdc.gov/</u> <u>chronicdisease/about/costs/index.htm</u>. Published March 23, 2023. Accessed May 10, 2023.
- 4. Carlson SA, Adams EK, Yang Z, Fulton JE. Percentage of Deaths Associated With Inadequate Physical Activity in the United States. Prev Chronic Dis. 2018;15:170354. DOI: <u>http://dx.doi.org/10.5888/pcd18.170354</u>

# **Developing the Midcourse Report**

HHS contracted and worked with a literature review team to review the evidence on effective strategies for increasing physical activity among older adults - and to summarize their findings in a report, the Physical Activity and Older Adults Systematic Literature Review. This work was supported by the President's Council on Sports, Fitness & Nutrition Science Board, made up of 11 experts in physical activity and older adults. The literature review examined how effective a variety of settings are for supporting increased physical activity among older adults. These settings included communities, assisted living facilities, faith-based settings, health care institutions, and homes/independent living facilities/neighborhoods. Community, home, and health care emerged as key settings where physical activity interventions were successful among older adults.

HHS based the Midcourse Report primarily on this literature review — and successful interventions from Step It Up! The Surgeon General's Call to Action to Promote Walking and Walkable Communities and The Guide to Community Preventive Services (referred to in this report as The Community Guide). Like the

# About the Community Preventive Services Task Force

The Community Preventive Services Task Force (CPSTF) issues evidence-based recommendations and findings for prevention strategies, services, and programs — including many aimed at increasing physical activity. These findings are listed in The Community Guide. The Community Guide uses a science-based approach that relies on systematic literature review methodology to determine whether an intervention is effective at improving health and preventing disease. CPSTF has recommended several interventions shown to increase physical activity among older adults, and those recommendations are included in this report.

Learn more: <u>https://www.thecommunityguide.</u> org/pages/about-community-preventiveservices-task-force.html

Guidelines, the Midcourse Report will be widely promoted online and in print through various communication strategies, such as Move Your Way<sup>®</sup> campaign materials for professionals and consumers; the Active People, Healthy Nation<sup>SM</sup> initiative; and partnerships with organizations that promote physical activity.

The primary audiences for the Midcourse Report are policymakers; exercise and health professionals; clinicians; gerontologists; built environment professionals; local, state, territorial, and Tribal leaders; and others working with older adults. The evidence presented in the Guidelines shows that physical activity has immediate and long-term benefits for all Americans, including older adults, and that it's never too late to start being active. The purpose of this Midcourse Report is to highlight strategies to support physical activity among older adults in a variety of settings so they may achieve the benefits of physical activity as outlined in the Guidelines.

# **Meeting the Physical Activity Guidelines**

The second edition of the Physical Activity Guidelines for Americans provides key guidelines for all age groups, including older adults. Older adults should follow the key guidelines for adults, but there are additional guidelines specific to older adults. Older adults should include aerobic, muscle-strengthening, and multicomponent activities in their weekly routine (Figure 1).



# **Key Guidelines for Adults**

- Adults should move more and sit less throughout the day. Some physical activity is better than none. Adults who sit less and do any amount of moderate-to-vigorous physical activity gain some health benefits.
- For substantial health benefits, adults should do at least 150 minutes (2 hours and 30 minutes) to 300 minutes (5 hours) a week of moderate-intensity aerobic activity or 75 minutes (1 hour and 15 minutes) to 150 minutes (2 hours and 30 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Preferably, aerobic activity should be spread throughout the week.
- Additional health benefits are gained by engaging in physical activity beyond the equivalent of 300 minutes (5 hours) of moderate-intensity physical activity a week.
- Adults should also do muscle-strengthening activities of moderate or greater intensity that involve all major muscle groups on 2 or more days a week, as these activities provide additional health benefits.



# **Key Guidelines for Older Adults**

The key guidelines for adults also apply to older adults. In addition, the following key guidelines are just for older adults:

- As part of their weekly physical activity, older adults should do multicomponent physical activity that includes balance training as well as aerobic and muscle-strengthening activities.
- Older adults should determine their level of effort for physical activity relative to their level of fitness.
- Older adults with chronic conditions should understand whether and how their conditions affect their ability to do regular physical activity safely.
- When older adults cannot do 150 minutes of moderate-intensity aerobic activity a week because of chronic conditions, they should be as physically active as their abilities and conditions allow.

# Older adults need a mix of physical activity to stay healthy.

#### Moderate-intensity aerobic activity

at least

Anything that gets their heart beating faster counts.

Muscle-strengthening activity

Activities that make their muscles work harder than usual count.



As part of their weekly activity, older adults need multicomponent physical activity, which includes aerobic, muscle-strengthening, and balance activities.

Multicomponent activity — like dancing, water aerobics, or tai chi — helps keep older adults' bodies strong and lowers their risk of falling.

# What Is Multicomponent Physical Activity?

Multicomponent physical activity incorporates aerobic, muscle-strengthening, and balance components. For older adults, multicomponent physical activity is especially important because it can improve physical function and decrease the risk of falls or fall-related injury. People can do multicomponent physical activity at home or in a structured group setting. Many studied interventions combine all types of exercise (aerobic, muscle-strengthening, and balance) into 1 session, and this has been proven effective. A multicomponent physical activity program could include walking a dog (aerobic), doing bicep curls (musclestrengthening), and standing on 1 foot (balance). Recreational activities such as dancing, yoga, tai chi, gardening, or sports can also be considered multicomponent because they often incorporate multiple types of physical activity.

# Safely Meeting the Physical Activity Guidelines

People can begin or restart physical activity at any age, and older adults have many options for living an active lifestyle that meets the key guidelines. Taking a structured exercise class, gardening, walking to the bus for an appointment, and playing with grandchildren are all different ways to move more throughout the day. Healthy older adults who plan gradual increases in their weekly amounts of physical activity generally do not need to consult a clinician before becoming physically active. However, clinicians and exercise professionals can help people attain and maintain regular physical activity by providing advice on appropriate types of activities and ways to progress at a safe and steady pace. Older adults with chronic conditions should be under the care of a health care provider and can talk with their clinician to determine whether their conditions limit, in any way, their ability to do regular physical activity. Such a conversation can also help people learn about the types and amounts of physical activity that are appropriate for their abilities and chronic conditions.

In general, people who engage in physical activity can protect themselves by using appropriate gear and sports equipment; choosing safe environments; following rules and policies; and making sensible choices about when, where, and how to be active. Moreover, to reduce the risk of injuries and other adverse events, older adults can choose types of physical activity that are appropriate for their current fitness level and health goals. Starting with lower-intensity activities and gradually increasing the frequency, intensity, and duration of activities can reduce the risk of injury.

# **Defining Intensity and Using the Talk Test**

**Intensity** refers to how much work someone is doing or the magnitude of the effort required to perform an activity or exercise. Intensity can be expressed either in absolute or relative terms.

- Absolute intensity is the amount of energy expended during the activity but doesn't take a person's cardiorespiratory fitness into account. Examples of absolute moderate-intensity activities include brisk walking, recreational swimming, doubles tennis or pickleball, general yardwork and home repair work, ballroom or line dancing, and exercise classes such as water aerobics.
- Relative intensity uses a person's level of cardiorespiratory fitness to assess level of effort. Certain activities that are considered light-intensity — such as some types of yoga or tai chi may be perceived as moderate- or vigorous-intensity for some older adults.

Either absolute or relative intensity can be used to monitor progress toward meeting the key guidelines. Because older adults expend more energy than younger adults for the same task and because aerobic capacity declines with age, the Guidelines recommends that older adults use relative intensity to guide their level of effort rather than absolute intensity. People can easily gauge relative intensity by using the talk test.

**The Talk Test** is a simple way to measure relative intensity. When using relative intensity, people pay attention to how physical activity affects their heart rate and breathing. As a rule of thumb, a person doing moderate-intensity aerobic activity can talk, but not sing, during the activity. A person doing vigorous-intensity activity cannot say more than a few words without pausing for a breath.

# Trends Over Time and Among Different Age Demographics

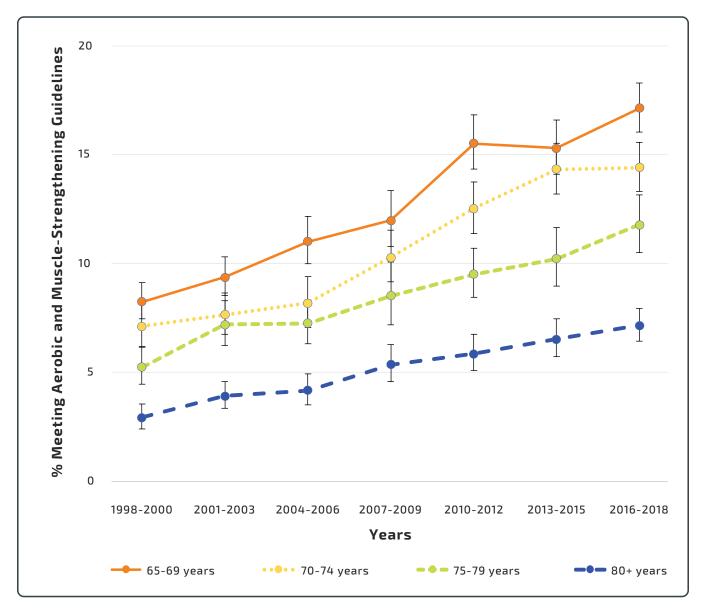
Older adults in the United States become less active as they age. Only 7 percent of adults age 80 years and older meet the recommendations in the *Guidelines* (both aerobic and muscle-strengthening components) during leisure-time physical activity, compared to 17 percent of adults ages 65 to 69 years (Figure 2).<sup>1</sup> The decrease in activity with age is notable because even the oldest adults benefit from physical activity. Encouragingly, national surveillance data suggest that older adults have become more active in recent decades: From 1998 to 2018, the prevalence of meeting both the aerobic and muscle-strengthening recommendations in the *Guidelines* increased from 5.5 percent to 13.9 percent among adults age 65 years and older.<sup>2</sup> Although this is good news, the prevalence of older adults meeting the recommendations is still low and is a public health concern. Despite widespread increases across demographic subgroups, significant disparities remain.<sup>3,4</sup> For example, women, people with less education, and those with lower incomes have lower levels of physical activity than men, people with more education, and those with higher income levels (Figure 3).<sup>4</sup>



#### Sources:

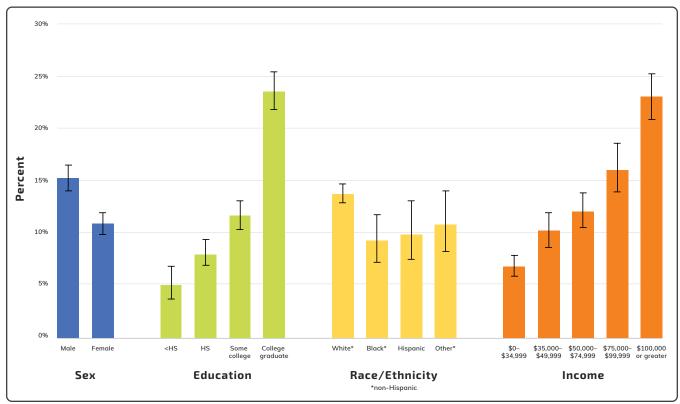
- 1. Centers for Disease Control and Prevention. National Health Interview Survey (NHIS)—1998-2018. https://www.cdc.gov/nchs/nhis/1997-2018.htm. Accessed January 25, 2023.
- 2. Hyde ET, Whitfield GP, Omura JD, Fulton JE, Carlson SA. Trends in Meeting the Physical Activity Guidelines: Muscle-Strengthening Alone and Combined With Aerobic Activity, United States, 1998-2018. J Phys Act Health 2021;18(S1):S37-S44.
- 3. Elgaddal N, Kramarow EA, Reuben C. Physical Activity Among Adults Aged 18 and Over: United States, 2020. NCHS Data Brief 2022(443):1-8.
- Centers for Disease Control and Prevention. National Health Interview Survey (NHIS)—2020. https://www.cdc.gov/nchs/nhis/2020nhis.htm. Accessed January 25, 2023.

Figure 2. Prevalence of Meeting the Aerobic and Muscle-Strengthening Guidelines Among Older Adults by Age Group — National Health Interview Survey, 1998–2018



**Source:** Centers for Disease Control and Prevention. National Health Interview Survey, 1998–2018. https://www.cdc.gov/nchs/nhis/1997-2018.htm.

# Figure 3. Prevalence of Meeting the Aerobic and Muscle-Strengthening Guidelines Among Older Adults by Demographic Subgroup — National Health Interview Survey, 2020



Abbreviations: HS, high school.

Source: Centers for Disease Control and Prevention. National Health Interview Survey (NHIS), 2020. https://www.cdc.gov/nchs/nhis/2020nhis.htm.

**Notes:** Income was estimated using single imputation for 2,602 of 9,626 participants in the sample (27%). Error bars represent upper and lower bounds of the 95% confidence interval.

# **Benefits of Physical Activity**

Most people can benefit from being more physically active and meeting the activity levels described in the *Guidelines*, but regular physical activity is key for healthy aging in particular — including the ability to perform activities of daily living more easily. Table 1 summarizes the benefits of physical activity for older adults. While many of these benefits are relevant to adults of all ages, falls prevention and reduced risk of fall-related injury are specific to older adults. In addition, physical activity may offer protective effects against osteoporosis and age-related sarcopenia. People can experience some benefits of physical activity immediately. These include reduced feelings of anxiety, reduced blood pressure, and improved sleep. Other benefits — such as increased cardiorespiratory fitness, increased muscular strength, and sustained reductions in blood pressure — require regular physical activity over time.

# Table 1: Health Benefits Associated with Physical Activity for Older Adults

#### Adults and Older Adults

- Lower risk of all-cause mortality
- Lower risk of cardiovascular disease mortality
- Lower risk of cardiovascular disease (including heart disease and stroke)
- Lower risk of hypertension
- Lower risk of type 2 diabetes
- Lower risk of adverse blood lipid profile
- Lower risk of cancers of the bladder, breast, colon, endometrium, esophagus, kidney, lung, and stomach
- Slowed or reduced weight gain
- Weight loss, particularly when physical activity is combined with reduced calorie intake
- Prevention of weight regain following initial weight loss
- Improved bone health
- Improved physical function
- Lower risk of falls
- Lower risk of fall-related injuries
- Improved mental and cognitive outcomes including:
  - Improved quality of life
  - Reduced risk of dementia (including Alzheimer's disease)
  - Improved cognition
  - Reduced risk of depression
  - Reduced long-term feelings and signs of anxiety (trait anxiety) for people with and without anxiety disorders
  - Reduced short-term feelings of anxiety (state anxiety)
  - Improved sleep outcomes (increased sleep efficiency, sleep quality, deep sleep; reduced daytime sleepiness, reduced frequency of use of medication to aid sleep)
  - Improved sleep outcomes that increase with duration of acute episodes of physical activity

**Source:** U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans, 2nd edition. Washington, DC: U.S. Department of Health and Human Services; 2018.



Most (approximately 85%) older adults have at least 1 chronic condition, such as type 2 diabetes, cardiovascular disease, osteoarthritis, obesity, or cancer. Physical activity has significant benefits for all older adults and plays a role in preventing and managing the progression of chronic disease and related symptoms. The health benefits associated with regular physical activity for people with chronic health conditions and disabilities are listed in Table 2. The benefits of physical activity largely outweigh the risk of injury and heart attacks — 2 concerns that may prevent people from becoming more physically active.

# Table 2. Health Benefits Associated with Regular Physical Activity for People with Chronic Health Conditions and Disabilities

#### **Cancer Survivors**

- Improved health-related quality of life
- Improved fitness
- Lower risk of dying from site-specific cancer for breast, colorectal, and prostate cancer survivors
- Lower risk of all-cause mortality for breast and colorectal cancer survivors

#### People with Osteoarthritis (Knee and Hip)

- Decreased pain
- Improved physical function
- Improved health-related quality of life

#### People with Hypertension

- Lower risk of cardiovascular disease mortality
- Reduced cardiovascular disease progression
- Lower risk of increased blood pressure over time

#### People with Type 2 Diabetes

- Lower risk of cardiovascular disease mortality
- Reduced progression of disease indicators: hemoglobin A1C, blood pressure, body mass index, and lipids

**People with Dementia** 

Improved cognition

**People with Multiple Sclerosis** 

- Improved physical function, including walking speed and endurance
- Improved cognition

People with Spinal Cord Injury

Improved walking function, muscular strength, and upper extremity function

People with Diseases or Disorders that Impair Cognitive Function (Including Attention-Deficit Hyperactivity Disorder [ADHD], Schizophrenia, Parkinson's Disease, and Stroke)

#### Improved cognition

**Source:** U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans, 2nd edition. Washington, DC: U.S. Department of Health and Human Services; 2018.

# **Barriers to Physical Activity**

There are several barriers that can influence an individual's perceived or actual ability to engage in physical activity. For older adults, barriers often relate to capabilities (i.e., individual attributes), opportunities (i.e., external factors), or motivation (i.e., personal attitudes and beliefs). Understanding the barriers that individuals or communities face is key to delivering effective and equitable interventions.

Barriers to physical activity differ from individual to individual and are influenced by socioeconomic, cultural, built environment, and other community factors. For example, some people don't know about or have access to safe places to be physically active, some live in communities that are not conducive to activity, and some have physical or cognitive limitations. Additionally, access to specialized facilities or equipment — especially for muscle-strengthening activities — can be costly. Older adults may have unique concerns related to safety or fear of falling, and many face challenges related to chronic health conditions, mobility, and pain that can impact their perceived or actual ability to engage in physical activity. Neighborhood characteristics such as poor-quality sidewalks or insufficient lighting can reduce actual or perceived safety. Other common barriers include perceived lack of time, poor weather, and lack of enjoyment. Table 3 in the Cognitive Behavioral Strategies section shows examples of potential solutions to some common barriers to physical activity.

Societal expectations about the types of physical activity older adults can participate in may contribute

to a lack of social support. In addition to age, intersecting social identities such as ability, race, and gender or sexual identity may interact with environments to influence feelings of safety, belonging, and inclusion. Not feeling safe or comfortable in public spaces may reduce opportunities to be physically active. Racism both interpersonal and structural — negatively affects the mental and physical health of millions of people, preventing them from attaining their highest level of health and consequently affecting the health of our nation.

Getting and staying active can be especially difficult as people age, and the barriers that older adults face cannot be addressed with just 1 strategy or within 1 setting. The strategies outlined in this report can be combined and tailored to different community contexts and a variety of settings. Through direct engagement with communities that experience inequities and through continued exploration of barriers, individuals and organizations from a variety of sectors can use the strategies highlighted in the What Works: Key Strategies section to help older adults overcome barriers to physical activity and be more active.

# **Equity and Physical Activity**

Not everyone has equal access to safe places to be physically active. Different racial and ethnic groups have unequal rates of physical activity. These disparities exist in part because many people live in neighborhoods with few safe spaces or other social or environmental supports to promote physical activity. Even in places with safe spaces for physical activity, some people may be left out. For example, recreation areas may not be designed for older adults or people with disabilities, and this can contribute to disparities in physical activity. Some older adults who have low incomes or live in rural areas may not be able to afford or even access broadband. This restricts their access to virtual physical activity programming and online exercise communities that provide opportunities for social connectedness. Severe weather events and temperature extremes associated with climate change may disproportionately affect certain populations or geographic locations. People also have multiple social identities, such as age, ability status, race, gender, income level, and religious affiliation. In addition to physical barriers, these intersecting identities and historical contexts may interact with environments to influence feelings of safety, belonging, and inclusion. If people do not see others who look like them in public spaces (i.e., a lack of representation), they may not feel welcome. Feeling unsafe or uncomfortable in public spaces because of ageism, racism, sexism, or ableism may reduce opportunities to be physically active. Engaging with people, groups, and organizations most affected by inequities and disparities can improve understanding of the reasons for these types of experiences.

# What Works: Key Strategies

This section discusses 3 approaches to improving physical activity among older adults: policy, systems, and environmental approaches; behavior change; and physical activity programs. These strategies can be implemented wherever older adults spend their time. In order for these strategies to be effective and ensure equal access and benefits, it's critical that they address specific barriers faced by people from racial and ethnic minority groups with few safe spaces for physical activity — and that they're designed to be culturally and linguistically appropriate.

Within this section, embedded examples illustrate how older adults are getting physically active in different settings through programs or changes in community design. These spotlights include representation across different sectors and highlight ways to apply the strategies described in this report in different settings. Additional federally supported programs are listed in the appendix.

# Policy, Systems, and Environmental Approaches

Population-level strategies go beyond direct programming or interventions for individuals. These strategies involve policy, systems, and environmental approaches — such as those related to transportation and neighborhood environments — that give all people safe, easily accessible physical activity opportunities. This contrasts with strategies focused on the individual, which often require people to enroll in a program or intervention for a specific amount of time. Many structured programs and interventions show significant declines in participation over time — and have questionable impacts on sustained physical activity behaviors. When older adults leave their structured programs, the built environments they encounter need to support and sustain their physical activity behavior change efforts over time to reinforce or support a physically active lifestyle.



# **Portland, Oregon**

and accessible so that residents can safely get

portland.gov/bps/planning/age-friendly-city

portland.gov/transportation/programs

portland.gov/transportation/planning/

active as they age.

Where can I learn more?

adatransitionplan

Creating an Accessible Built Environment That Helps Residents Stay Active as They Age

# Who? Portland, Oregon Whot? City of Portland initiatives to make infrastructure and systems more age friendly

The buildings, streets, sidewalks, open spaces, and other infrastructure where we live and work — also known as the built environment — can have a major impact on our ability to safely get active. For example, it's safer and easier to walk, bike, or use a wheelchair in a city that has wide, smooth sidewalks and bike lanes. That's why the City of **Portland, Oregon**, prioritizes creating built environments that meet the needs of its residents as they age, with a focus on accessibility and equity.

Through efforts like its Age-Friendly City program, Portland works to create environments that make the city "a great place to grow up and grow old," says Alan DeLaTorre, Ph.D., Age-Friendly City Program Manager at Portland's Bureau of Planning and Sustainability (BPS).

Portland started its age-friendly initiative in 2006 as part of the World Health Organization's Global Network for Age-Friendly Cities and Communities. Since then, the city has adopted — and continues to carry out, with its partners — an Action Plan for an Age-Friendly Portland. The plan lays out steps for local agencies to take, like:

- Provide guidance to help developers create age-friendly housing for example, with features like zero-step entrances, wide hallways, and accessible bathrooms
- Partner with organizations that serve older adults and people with disabilities
- Implement policies that facilitate safe physical activity like a policy to ensure that transportation facilities are accessible to people of all ages and abilities
- Create parks and green spaces in historically underserved areas

# 🗰 Strategy: Team Up for Success

DeLaTorre explains that creating a built environment that's truly "age friendly" requires comprehensive crosssector collaboration. In Portland, a wide variety of organizations and individuals work together to implement the strategies laid out in the Action Plan for an Age-Friendly Portland, along with Multnomah County's similar action plan.

For example, Portland's plan names partners like TriMet, which provides bus, light rail, and commuter rail service. The Portland Bureau of Transportation (PBOT) works with TriMet to improve bus stops and routes — and creates sidewalks, curb cuts, safe pathways, and signs to help people get to their destinations. Another partner named in the plan is Portland Parks & Recreation, which works to make green spaces more accessible.

Lisa Strader, Americans with Disabilities Act (ADA) Coordinator for PBOT, says cross-agency collaboration is particularly important when it comes to addressing long-standing barriers that make it hard for residents to get from place to place. For example, older infrastructure may need many improvements to be accessible to all community members — more work than any 1 entity can do on its own.

"Making our region as age friendly and accessible as possible requires listening to community and collaboration," Strader says. "We get the best system when government agencies, community-based organizations, community members, and even businesses work together."

# 🝠 Impact: Walkable, Bikeable, 'Rollable' Neighborhoods

Making sure cities are walkable, bikeable, and "rollable" (meaning accessible by wheelchair) is key to helping all residents get active — and get where they need to go. These efforts are a foundational part of increasing accessibility, which is especially important for residents as they age.

To evaluate Portland's age-friendly environments, DeLaTorre is working with Portland State University on an analysis that includes a variety of metrics. For example, they're looking at:

- How far people need to walk (or bike or travel by wheelchair) to get to bus stops, parks, and other amenities
- The number of parks, street benches, curb cuts, public toilets, and other features in the city

"Looking at metrics provides an exciting opportunity for us to measure our current strengths and identify where we need to do better," DeLaTorre says. "That way, we can develop practical, actionable plans for making our community even more age friendly and accessible to all."

# Key Takeaway: Seeking Community Input Is Critical

Strader and DeLaTorre agree that effectively meeting the needs of community members requires intentionally seeking their input. That's why Portland makes a point to co-design the built environment with older adults, people with disabilities, families, caregivers, and service providers. For example, PBOT gathers input from the disability community during walking tours and focus groups, and DeLaTorre recently worked with older Black residents to co-create a mural that highlights physical activity and intergenerational connections.

"Co-creation is at the heart of our work," says DeLaTorre. "As public servants, our job is to take community members' vision and figure out what we need to do to make that vision a reality."

# **Community Design**

One strategy that has been shown to increase physical activity among older adults is making communities more walkable through community design. For example, researchers have found that people who live in walkable neighborhoods are more active than people who don't. Walkable neighborhoods make it safer and easier for community members to walk, bike, or wheelchair roll for recreation, fitness, or transportation.

Community design elements that improve walkability include:

- Availability of and access to everyday destinations
- Sidewalk connectivity, quality, and networks
- Social, aesthetic, and functional components



Walkable neighborhoods provide easy access to a mix of destinations, such as affordable home types; cultural centers; food outlets; health care institutions; parks, trails, and recreational facilities; and retailers. Such neighborhoods also have connected networks of "activity-friendly routes," such as safe and accessible high-quality sidewalks, curbs, and intersections; multi-use trails; safe bicycle infrastructure; and convenient public transit. For example, intersections may include clearly marked crosswalks, curb cuts that remove the need to step up onto a sidewalk from the road, and walk signals with audio and visual prompts that allow sufficient crossing time. These features help people — especially those who use mobility devices or have mobility impairments — safely cross the street. Wide sidewalks that have sufficient lighting and no trip hazards such as cracks or overgrowth can also improve walkability and create safer and smoother paths for older adults who use wheelchairs and other assistive devices. Walkable communities can also include social, aesthetic, and functional features that contribute to perceptions of safety and inclusion — such as benches, public art, public gathering spaces, shade, landscaping, access to bathrooms, and safe and free drinking water.

Policymakers can include physical activity and walkability considerations in policies like comprehensive (or master) plans, zoning and land use ordinances and subdivision guidelines, permitting practices, transportation and transit policies, roadway design and Complete Streets policies, Safe Streets and Roads for All, shared use agreements, Vision Zero, and recreation and open space plans and policies. Thoughtfully increasing physical activity through community design — in partnership with the community — has the potential to facilitate physical activity for everyone, regardless of age or ability.



# Community Preventive Services Task Force Recommendation on Built Environment Approaches

The Community Preventive Services Task Force (CPSTF) recommends built environment strategies that combine 1 or more interventions to improve pedestrian or bicycle transportation systems with 1 or more land use and environmental design interventions to increase physical activity. These strategies support policies and activities to connect pedestrian, bicycle, or public transportation networks (activity-friendly routes) to everyday destinations such as homes, health care institutions, shops, and parks.

Built environment strategies may help increase physical activity among older adults. These strategies may include providing access to safe walking routes or well-maintained sidewalks, bicycle routes separated from vehicular and pedestrian traffic, and accessible public transportation. Older adults can use these features to walk their dog to the park or their grandchildren to school, go to a local coffee shop or other business, or visit a senior center or doctor's office. Complete Streets is one approach to street design that encourages a safe and health-promoting environment for cyclists, transit riders, pedestrians, and motorists.

Learn more: https://www.thecommunityguide.org/findings/physical-activity-built-environmentapproaches.html



# Community Preventive Services Task Force Recommendation on Park, Trail, and Greenway Infrastructure Interventions

The Community Preventive Services Task Force (CPSTF) also recommends park, trail, and greenway infrastructure interventions when combined with additional interventions — such as community engagement, programming, public awareness activities, and access enhancements — to increase physical activity. CPSTF finds the economic benefits exceed the costs for park, trail, and greenway infrastructure interventions. Learn more and access information about increasing physical activity through parks, trails and greenways: <a href="https://www.thecommunityguide.org/findings/physical-activity-park-trail-greenway-infrastructure-interventions-combined-additional-interventions.html">https://www.thecommunityguide.org/findings/physical-activity</a>

The National Recreation and Park Association developed an implementation guide based on the CPSTF recommendation: <u>https://www.nrpa.org/publications-research/best-practice-resources/active-parks-implementation-guide-increasing-physical-activity-through-parks-trails-and-greenways/</u>

# **Behavior Change**

Behavior change strategies use individual-level approaches to influence knowledge, skills, attitudes, and beliefs related to physical activity. Behavior change approaches, such as cognitive behavioral strategies and physical activity counseling, are often components of physical activity programs and interventions and are an effective way to increase physical activity self-efficacy and change physical activity behavior.

## **Cognitive Behavioral Strategies**

Individual-level cognitive behavioral strategies can equip older adults with the knowledge and behavioral capability they need to engage in physical activity. These strategies may be even more effective if several are employed together as part of interventions like physical activity counseling or a formal physical activity program. Cognitive behavioral strategies include approaches such as increasing physical activity knowledge or awareness, goal setting, self-monitoring, barrier identification and problem-solving, and social support. These strategies can help people increase their self-efficacy related to successfully starting and maintaining greater amounts of physical activity. The strategies can be delivered via a variety of modes, including in person; via phone; through virtual counseling, such as through embodied conversational agent technology (i.e., animated computer characters that simulate face-to-face counseling); or through print or text materials. These approaches often begin with an assessment of current physical activity or fitness levels and development of incremental goals to increase physical activity.

# **Modes of Delivery for Physical Activity Strategies**

Delivery modes have a direct impact on the potential for large-scale implementation. They can influence the cost, acceptability, feasibility, reach, and effectiveness of interventions. They can also be tailored to an individual's or group's culture and linguistic proficiency. There are several effective methods for delivering physical activity messaging and programming.

Face-to-face (in-person or virtual) approaches and phone calls are one way to help older adults increase their physical activity levels. In-person interventions can occur in a variety of settings — such as the health care setting, congregate living facilities, or the home — and are a common way to deliver supervised physical activity programs and counseling. Moreover, with face-to-face interactions, a participant can receive direct feedback on their performance of an activity. Phone calls are another way to reach older adults and provide education or motivational support for physical activity. Virtual counseling or text message check-ins can remove transportation barriers to meeting in person.

Print materials can complement in-person or phone contact. Creating print materials in a variety of languages can help meet the needs of more people and provide information on the benefits of physical activity, behavior change tips, ways to overcome barriers, and suggested activities. They can be tailored to the physical activity levels of individuals, such as people just getting started or working to build up physical activity levels over time. Providing print materials also makes it possible for people to reread the content later rather than needing to remember what they heard during an appointment, in-person class, or meeting.



#### **Goal Setting**.

#### Physical Activity Knowledge or Awareness.

An important aspect of any intervention is increasing an individual's knowledge and awareness of physical activity. Knowledge and awareness of the health benefits of physical activity, how much and what types of physical activity are needed, and the role of physical activity in healthy aging can increase motivation and reduce some barriers. Providing information on different aspects of physical activity, such as how to do specific muscle-strengthening activities (i.e., skill building), can increase people's confidence or self-efficacy related to doing an activity. Sharing information about physical activity programs, especially those tailored to older adults or specific demographic populations, can help older adults identify relevant physical activity opportunities.

Physical activity goal setting can encourage older adults to achieve desired physical activity levels, starting from their current levels. Goal setting may utilize SMART goals — goals that are specific, measurable, achievable/attainable, realistic/relevant, and time-bound. This type of goal setting can help an individual turn a general goal (e.g., increase physical activity) into a tangible action (e.g., go for a 10-minute walk 3 times per week). Older adults should increase their physical activity gradually and set goals in line with their current abilities. To reduce the risk of injury, it's important for people to increase their amount of physical activity gradually over a period of weeks to months — in alignment with their abilities and fitness level.

# Community Preventive Services Task Force Recommendation on Digital Health Interventions

The Community Preventive Services Task Force (CPSTF) recommends digital health interventions to increase physical activity among adults age 55 years and older. Digital health interventions include 1 or more of the following strategies to deliver guidance and support tailored to an individual's activity level, age, and health status:

- Web-based interactive content (e.g., virtual coaching)
- Telephone sessions with intervention providers or automated voice messages and reminders
- Text messages and reminders
- Apps with goal setting, activity tracking, and reminder functions

Learn more: <u>https://www.thecommunityguide.org/findings/physical-activity-digital-health-interventions-adults-55-years-and-older.html</u>

#### Self-Monitoring.

Self-monitoring is a strategy for tracking and recording physical activity that can help older adults work toward achieving physical activity goals. It involves regular feedback, which can prompt and encourage behavior change. To self-monitor their physical activity, people can use a device (e.g., pedometer, wearable tracker, mobile app) or write down their information (e.g., in a physical activity log, journal, diary, or worksheet). People may keep their information private or share it — either socially or with a clinician or exercise professional — for further accountability and feedback. While the Guidelines recommends a weekly target instead of a daily one, tracking physical activity daily can provide valuable information about progress toward achieving weekly physical activity and fitness goals.

#### Barrier Identification and Problem-Solving.

## **Physical Activity Monitors**

Physical activity monitors, such as pedometers or accelerometers, can be effective tools for increasing physical activity among older adults when they're used as part of a physical activity intervention. Physical activity monitors can help people focus on physical activity goals and assess their own physical activity in real time. Many commonly owned devices — like activity trackers, smartwatches, and smartphones contain accelerometers and can be used to track physical activity or steps.

Barriers, both real and perceived, can reduce physical activity. Barrier identification is an important first step to help individuals overcome obstacles preventing them from adopting or maintaining physical activity behaviors. Problem-solving can help address identified barriers to physical activity by enabling people to come up with tangible and specific solutions (see Table 3). Using these 2 strategies together reduces the risk of inadvertently reinforcing a perceived barrier. Both barrier identification and problem-solving skills are typically practiced through physical activity assessments and counseling, often at the start of a physical activity program. These activities can increase older adults' confidence so they can be more physically active. Over time, it's important to reassess barriers, especially during different times of year when weather changes or when someone's lifestyle has changed (e.g., because of retirement, increased travel, caregiving, or the birth of a grandchild) because these changes may present different challenges.

# Table 3. Examples of Barriers and Potential Solutions for Older Adults



# Social Support.

# Internal (e.g., physical state and well-being, thoughts, feelings, or emotions)

Barrier	Potential Solution
Too tired/not enough energy	<ul> <li>Plan physical activity during periods of the day when you feel most energetic. Starting to move often provides an energy boost. Many older adults feel less fatigue during and after physical activity.</li> </ul>
Fear of falling	<ul> <li>Sign up for a group exercise class or training that includes balance components where there will be some form of supervision.</li> <li>Start slow and with activities you're most confident with (e.g., chair exercises for support with balance or walking in place to limit trip hazards).</li> </ul>
Joint pain	<ul> <li>Work with a physical therapist or clinician to develop a pain management plan.</li> <li>Try activities that may minimize discomfort, such as water aerobics, yoga, tai chi, or walking.</li> </ul>
Lack of knowledge or confidence about doing muscle- strengthening physical activities	<ul> <li>Get a comprehensive assessment from a physical therapist who can tailor a physical activity program.</li> <li>Try free online videos that demonstrate specific exercises.</li> <li>Ask if your local gym or community facility offers demonstrations of the muscle-strengthening equipment.</li> <li>Consider working with a personal trainer either individually or in a small group to learn proper form and engage in activity with personalized guidance.</li> </ul>
Lack of motivation or enjoyment	<ul> <li>Try finding social support through an accountability buddy or a virtual community. Physical activity can be a great way to connect with others, enjoy social interaction, and feel less isolated.</li> </ul>

## External (e.g., cost or access)

Barrier	Potential Solution
Bad weather or poor air quality	<ul> <li>Find opportunities to walk indoors — like at a mall, airport, grocery store, or big-box store.</li> </ul>
Expensive equipment	<ul> <li>Seek guidance from a physical therapist who can help design an effective physical activity program with items you might find at home (like books or detergent jugs for muscle-strengthening activity).</li> </ul>
No close gym facility	<ul> <li>Find ways to add physical activity to your day without specific equipment.</li> <li>For example, do household chores, garden, dance, or play with your grandchildren.</li> </ul>
	<ul> <li>Consider walking or bicycling to do errands.</li> </ul>
	<ul> <li>Look for physical activity programs you can access through technology (like mobile apps, television, or the internet).</li> </ul>

Social support from friends and family can increase motivation and promote physical activity participation. Group interaction (e.g., physical activity classes or programs designed for older adults) can foster social support, as can physical activity counseling (where participants can learn about different types of social support and identify strategies to build support networks). Walking groups or "buddy systems" that encourage participation in physical activity with others can provide friendship and emotional support for older adults working toward increasing physical activity levels. Group-based physical activity also provides opportunities for social engagement, which contributes to overall mental well-being and continued engagement. Clinicians and exercise professionals can



provide support while assessing an individual's physical activity levels and through follow-up appointments. Clinicians can also provide referrals to physical therapists, exercise professionals, or health professionals who can provide recommendations for home- or community-based programs based on an individual's assessment.

# **Detroit Parks & Recreation**

# Focusing on Fun to Keep Older Adults Active and Connected

Who? Detroit Parks & Recreation

What? A local government agency offering resources and services to help community members get active, build connections, and learn new skills.

Where can I learn more? <u>detroitmi.gov/</u> <u>departments/detroit-parks-recreation</u> One of the oldest parks and recreation systems in the nation, **Detroit Parks & Recreation** has been promoting quality of life, health, and community for all Detroiters since 1920. The department offers parks, greenways, and recreation centers as well as a wide range of programs, events, and initiatives.

Among its many programs, the department offers a variety of fitness and wellness classes specifically intended to help older adults maintain an active and healthy lifestyle. The classes are designed to meet the needs of participants at all fitness and experience levels. And there's a focus on building connections and camaraderie as much as on fitness.

"Providing accessible physical activity opportunities is one of our top priorities, but promoting connectivity is just as important," says John Armstrong, the department's Assistant Director of Recreation. "We work hard to bring community members together and give them a reason to get out and be happy."

#### 🇰 Strategy: Focus on Fun — for Everyone

Lisa Cunningham, Senior Coordinator for Detroit Parks & Recreation, describes fun as the key to successful programming. She says making programs fun can look like offering prizes as incentives for older adults to participate in group walks or playing upbeat music during aerobics activities.

This focus on fun is also, in part, why the department hosts events like the Detroit Senior Olympics and Senior Friendship Day every year. The Senior Olympics is a 3-day event where older adults compete in table games, soccer, basketball, and more. And Senior Friendship Day — which thousands of Detroiters attend — features music, dancing, and entertainment, as well as fitness and health education.

"We offer these special events to give older adults a chance to reconnect with old friends, form new friendships, and have an opportunity to just get out and see their beautiful city," says Cunningham. "If they're smiling, that's how we know they'll come back. Those smiles mean the world."

Cunningham also says that for many older adults in Detroit, events like the Senior Olympics and Senior Friendship Day are an introduction to the services and programs that Detroit Parks & Recreation offers. "They have such a good time, they want to tell their friends and come back," she says. "These activities act as a gateway for older adults to utilize their local parks and recreation centers to help maintain a healthy lifestyle as they age."

## 🤧 Impact: Health Benefits in Safe Spaces

In a 2020 community needs assessment in Detroit, residents identified **services and programming for seniors** and **access to safe outdoor spaces** as important issues. These are needs that Detroit Parks & Recreation is well positioned to meet.

The department offers its programs and fitness classes at **12 recreation centers** across the city, and many of those fitness classes meet the specific needs of older adults. Examples include Zumba classes that are adapted for people who have trouble standing and water aerobics classes, which are easier on participants' joints than traditional aerobics offerings.

The department also offers classes that the Centers for Disease Control and Prevention recognizes as **Arthritis-Appropriate, Evidence-Based Interventions** — like Walk with Ease and Fit & Strong. The designation means the programs are proven to reduce arthritis symptoms and teach participants how to safely increase their physical activity to manage arthritis and other chronic conditions.

In addition, Detroit Parks & Recreation manages over **300 parks**, many of which have designated walking paths with fitness stations that feature accessible options for physical activity. The department also works to make sure a variety of activities take place at many times throughout the day at parks. As the department notes in its strategic plan, this helps promote a natural sense of safety through "neighbors looking out for neighbors." To further create a sense of safety, the department prioritizes park features like open sight lines, amenities close to pathways, and clear and open access points to nearby neighborhoods.

# Key Takeaway: Community Partnerships Increase Impact

Armstrong notes that historically, community groups have filled gaps to meet a variety of needs among residents. He says that for local government agencies like Detroit Parks & Recreation, partnering with those organizations is key to providing the most impactful services and resources for community members. For example, the department looks to regional park groups like the Detroit Parks Coalition to help coordinate programs within Detroit Parks & Recreation spaces.

"One of the most helpful things that a municipality can do is highlight the work that community groups are already doing and support their leadership in citywide improvements," Armstrong says. "At Detroit Parks & Recreation, we intentionally recognize and uplift community-based efforts because we've seen firsthand the positive impact they have. And when we work together, that impact only increases."



# **Physical Activity Counseling**

Physical activity counseling is a common and effective feature of physical activity interventions. Physical therapists, occupational therapists, and other exercise or health professionals who work with older adults can all lead physical activity counseling. It can happen in person, virtually, or via the phone and can include a variety of individual-level cognitive behavioral strategies — such as building physical activity knowledge or awareness, goal setting, self-monitoring, barrier identification and problemsolving, and social support.

When providing tailored physical activity guidance, professionals should consider individual factors such as age, gender, health and ability status, self-efficacy, skills, health beliefs about physical activity, and barriers to physical activity. They should also consider social and environmental factors such as social support, home and neighborhood environments (including where someone lives and where social services are provided), car ownership and driving ability, and cultural factors.

Providing in-person counseling along with printed resources can further improve physical activity levels.



# U.S. Preventive Services Task Force Recommendation on Behavioral Counseling

The U.S. Preventive Services Task Force (USPSTF) recommends behavioral counseling interventions, including nutrition and physical activity counseling, to promote a healthy diet and physical activity for adults at increased risk of cardiovascular disease (grade B recommendation). It's recommended that clinicians provide this service to patients since it has been found to improve health outcomes. The Affordable Care Act requires private insurers and Medicare to cover preventive services that USPSTF identifies as grade A or B.



#### **Exercise Programs**

**Physical Activity Programs** 

Physical activity programs vary widely in the intervention design and strategies used to increase physical activity. Structured exercise programs guide participants through specific exercises or prescribe a set of exercises for participants to complete. Lifestyle-based physical activity programs encourage participants to engage in more physical activity throughout the day — typically beyond or in addition to structured exercise. Both structured exercise and lifestyle-based physical activity programs can help individuals find new ways to be active that fit their everyday lives.

Structured exercise programs help older adults engage in specific exercises for a set amount of time. Exercise is a form of physical activity that is planned, structured, repetitive, and performed with the goal of improving or maintaining health or fitness. All exercise is physical activity, but not all physical activity is exercise. Fitness facility staff (e.g., personal trainers), physical therapists, occupational therapists, or other exercise or health professionals can lead exercise programs — in person or virtually. Supervision, whether in group-based or individual exercise programs, can support participant confidence and provide specific guidance on various types of exercise.

# All exercise is physical activity, but not all physical activity is exercise.

Exercise is a form of physical activity that is planned, structured, repetitive, and performed with the goal of improving or maintaining health or fitness.

Personalized exercise programs often include a prescribed or packaged set of exercises for participants to complete. These programs can be tailored to the individual's physical activity and fitness goals, physical function, health conditions, current physical activity or fitness level, and readiness to change behaviors. Group-based exercise programs also provide opportunities for social engagement, which contributes to overall mental well-being and continued engagement.

Exercise programs for older adults should include multicomponent physical activity by addressing 2 or more domains of physical activity — these domains are aerobic, muscle-strengthening, and balance. Programs may also include functional training and flexibility.

# EnhanceFitness

# **Helping Older Adults Get Active and Stay Independent**

#### Who? Enhance®Fitness

What? An evidence-based group exercise and falls prevention program that helps older adults at all fitness levels get more active so they can lead independent lives.

Where can I learn more? projectenhance.org/enhancefitness Falls are a leading cause of injury among older adults, but physical activity can help prevent fall-related injuries — and allow older adults to stay active and independent. That's why hundreds of organizations across the country offer **EnhanceFitness** programs to older adults in their communities.

ZODDONIN

EnhanceFitness is a low-cost, evidence-based program that's specifically designed to help older adults at different fitness levels get more active. Seattle-based nonprofit Sound Generations manages EnhanceFitness in partnership with the University of Washington Health Promotion Research Center.

Certified instructors lead EnhanceFitness classes both virtually and at YMCAs and other organizations nationwide. A typical 1-hour class includes aerobic activity, strength training, stretching, and balance exercises — and instructors aim to set a pace that's right for the participants. About 60 percent of participants are age 70 years or older, and more than 20 percent are 80 years or older.

"We've found that over the course of the 16-week program, participants grow more confident in their ability to do things independently," says Summer Cruff, Director of Community Health Programs at YMCA of the Suncoast in Florida. "That's because we're following the EnhanceFitness evidence-based standards, which are proven to help older adults improve their health. We also encourage the participants by emphasizing that we're following the Physical Activity Guidelines — that's a great motivator."

In addition, the Centers for Disease Control and Prevention recognizes EnhanceFitness as an **Arthritis**-**Appropriate, Evidence-Based Intervention**. That means the program is proven to reduce arthritis symptoms and teach participants how to safely increase their physical activity to manage arthritis and other chronic conditions.

#### 🍈 Strategy: Make It Fun

EnhanceFitness focuses not just on fitness but also on building participants' confidence in their ability to get active and reducing their fear of falling. In addition, the program has a strong emphasis on social connection.

"Of course we work on physical muscle-strengthening in EnhanceFitness — but we also work our social muscles!" says Paige Denison, Director of Health, Wellness, and Project Enhance at Sound Generations. For example, instructors for virtual sessions are encouraged to "open" the classroom early so participants can socialize and catch up with each other before class.

Denison says that for many older adults who've been socially isolated, EnhanceFitness offers a "fitness family" — which is key to encouraging them to prioritize their health. She also notes that instructors recognize the importance of keeping participants engaged. "We work really hard to make it fun so that it's not something participants feel like they have to do but something they want to do!"

Cruff says many participants who complete 16 weeks of EnhanceFitness classes sign up for another session: "People come back because it's fun and they feel better about themselves when they're participating."

#### 🥩 Impact: Physical, Mental, and Social Benefits

Today, there are EnhanceFitness programs in **44 states**, and **more than 105,000 people** have participated. Since EnhanceFitness launched as a pilot program in 1993, the response from participants has been overwhelmingly positive:

- 99 percent of participants say they would recommend EnhanceFitness to a friend
- 94 percent of participants gave themselves a rating of 3 or higher for improvement in physical abilities as a result of participating in EnhanceFitness (with 1 being no improvement and 5 being great improvement)

In addition, EnhanceFitness has been shown to:

- Improve physical function
- Decrease depression
- Protect against falls and fall-related injuries
- Provide a social benefit
- Reduce health care costs
- Decrease unplanned hospitalizations
- Decrease mortality rates



#### Key Takeaway: There's No Need to Start from Scratch

Denison explains that implementing an evidence-based program like EnhanceFitness is often easier for organizations than creating their own programs — and is likely to result in better outcomes.

"When you have an established, evidence-based program, you don't need to reinvent the wheel," says Denison. "Instead, you can focus on raising awareness and delivering the program to best meet the needs of people in your community."

- Find an EnhanceFitness class near you at: projectenhance.org/locations
- Learn how to become an EnhanceFitness instructor at: projectenhance.org/ef-become-instructor



#### Lifestyle-Based Physical Activity Programs

Lifestyle-based physical activity programs support and empower older adults in their efforts to increase their physical activity in ways that work best with their current lifestyle. These interventions often incorporate physical activity counseling, which uses cognitive behavioral strategies to help older adults identify physical activity opportunities in their homes and communities. Lifestyle-based programs allow older adults to decide how they want to engage in physical activity throughout their day — whether that's through structured physical activities, chores, errands, walking or biking for transportation, or leisure-time physical activity. By helping older adults find activities they enjoy, lifestyle-based programs can lead to a routine of regular physical activity. Even small amounts of physical activity

count toward meeting the recommendations in the Guidelines, and when people find ways to incorporate physical activity throughout the day — such as taking the stairs, playing pickleball with friends, or carrying groceries — it all adds up.

# Where It Works: Key Settings

One way to address the low physical activity levels among older adults is to create opportunities for activity in settings where older adults already spend their time. While physical activity programs and interventions can occur in many locations — such as places of worship, senior housing facilities, or worksites — the Physical Activity and Older Adults Systematic Literature Review identified the following as key settings in which physical activity interventions have been implemented successfully:

- Community
- Health care
- Home

## Community

The community setting can be defined as the places and environments where people in a particular geographic area live or congregate. This can include locations like schools, faith-based organizations, community and senior centers, Tribal facilities, gyms, and libraries — as well as the surrounding infrastructure, such as sidewalks, streets, trails, and public transportation. The community environment, as well as programs within the community, can play a role in increasing physical activity levels among older adults. For example, pedestrian, bicycle, and public transportation systems can help older adults access programs and places that provide opportunities for physical activity (e.g., parks or programs offered in community or senior centers). This can also make it easier for older adults to use active transportation (walking, rolling, bicycling, and taking transit) for routine tasks, such as going to the store or an appointment or visiting a friend. Interventions that are broadly implemented across communities through programs, practices, and policies can help make physical activity the easy choice and promote thriving, active communities.

# **Newington Senior and Disabled Center**

Staying Flexible and Keeping It Creative to Meet Older Adults' Needs



What? A safe and welcoming place for older adults and people with disabilities to get active, socialize, and learn new skills.

Where can I learn more? <u>newingtonct.</u> gov/2432/Senior-Disabled-Center Getting regular physical activity is one of the most important steps that older adults can take to stay healthy and independent. And what better way to get active than in a fun community setting that combines social connectedness with evidence-based programs to improve health? That's exactly what the **Newington Senior and Disabled Center** — and other senior centers across the country strives to accomplish.

In the past, senior centers often focused mostly on activities to combat social isolation, says Jaime Trevethan, Director of the Newington Senior and Disabled Center. "The senior center was where you would go to play bingo, do your quilting club, and have lunch. But they've evolved to be much more than that — a sort of 'one-stop shop' to meet older adults' needs, combining multiple resources to help people age successfully."

This includes offering people the chance to gain new skills and pursue various interests — Newington's center, for example, has a computer lab, a volunteer-run organic garden, and a woodshop. But it also means helping people manage everyday challenges like filling out tax paperwork.

And, of course, it means focusing on physical activity as a key component of health. Newington's center has a fully equipped fitness room and offers a variety of programs — from chair aerobics and an indoor Walk with Me program to tai chi, Zumba, and line dancing. In addition, instructors can modify all programs to fit people's individual abilities and fitness levels.

#### 🎁 Strategy: Address Barriers to Physical Activity Head-On

Offering a variety of flexible programs is just one part of the Newington Senior and Disabled Center's approach. To successfully engage older adults, the center's staff members know they need to address a main barrier for many older adults: the fear of falls and injuries.

"We want to help people overcome the fear of falling, which can be just as dangerous as actually falling because it makes them afraid to go out and be active," Trevethan says. "So they're not doing the things that could help lower their risk of falling — like physical activity — for fear of getting hurt."

To address this, the center offers professional fall risk and balance assessments, as well as educational speaker sessions about balance, falls prevention, and home safety. Members can also enroll in 2 evidence-based falls prevention physical activity programs — Tai Ji Quan: Moving for Better Balance and A Matter of Balance. During any physical activity, the center's professional staff teaches and encourages proper techniques and safety precautions.

The other main barrier Trevethan identifies isn't unique to older adults: a lack of motivation to get active. But the center has a solution for that as well: "We try to make it fun," Trevethan says. "We offer social fitness programs like Wii bowling, cornhole, and pickleball to engage people — and we are working on an evidence-based Bingocize program, which combines the ever-popular bingo with exercise."

#### 🥩 Impact: Benefits Beyond Physical Health

The Newington Senior and Disabled Center currently serves about **1,600 active members** — a significant number in a town of just 30,000 people. With **low membership fees of \$5 to \$10 a year**, the center is very affordable — and it can waive the fee when cost is an issue. Most of the center's funding comes out of the town's annual budget. But the center also earns revenue through its volunteer-run coffee shop and gift shop, fundraisers, and member donations.

According to Trevethan, part of the center's impact comes from leveraging **connections with the community** — like other Newington town departments, health care facilities, or the local college. Community partners offer certain services, such as balance assessments for older adults or presentations by expert speakers, free of charge. "It's not just about physical or mental health," Trevethan says. "It includes emotional, social, and spiritual health. We're here to maintain all of those things."

In addition, the center is **1 of only 7 senior centers in Connecticut to be accredited by the National Council on Aging's National Institute of Senior Centers**. This designation shows that the center is operating at the highest standards and keeps it at the forefront of new and innovative programming and funding opportunities.

# -

#### Key Takeaway: Adapting to Changing Needs Requires Keeping an Open Mind

When asked what advice she would give to other organizations trying to replicate the Newington Senior and Disabled Center's success, Trevethan highlights the importance of being flexible and keeping an open mind.

"People are living longer and aging more successfully, which means you get a very diverse population — age-wise and in terms of personalities, interests, and needs — within that 'older adults' group. It's important to be able to shift and accommodate those various needs."

### **Health Care**

Many older adults have regular interactions with the health care system, including primary care and specialty care at clinics, hospitals, Tribal health facilities, or skilled nursing facilities. In the health care setting, older adults can receive tailored care and specific guidance on the benefits of physical activity for their individualized situation — including considerations of chronic disease risk factors, symptoms, disease status, mobility, and socioeconomic status. Clinicians often address functional independence — an individual's ability to perform activities of daily living and a key indicator of health status — and these discussions provide an opportunity to share specific physical activity recommendations. A benefit of the health care setting is clinician or health professional oversight of physical activity programming. This oversight can provide extra assurance to individuals who are getting started with physical activity; getting active during or after cancer treatment; or becoming active after a cardiac or other health event that has affected their mobility, functional capacity, or cardiorespiratory fitness.



# University of California San Francisco **Cardiac Rehab**

**Providing Comprehensive Support to Help People with Heart Disease Improve Their Health** 



Francisco cardiac rehabilitation program

What? A medically supervised program for people with heart disease that combines physical activity, health behavior counseling, and psychological support.

Where can I learn more? cardiacrehab. ucsf.edu/about-program

For people with heart disease, like those who've had a heart attack or heart surgery, the process of improving their health can feel daunting. Many may wonder what activities are safe for them and how they can prevent future heart problems. That's why organizations like the University of California San Francisco (UCSF) offer cardiac rehabilitation programs.

Cardiac rehab is designed to help heart disease patients regain their strength and mobility and to teach them how to protect their heart health moving forward. While physical activity is a main component of cardiac rehab, it's not the sole focus. Instead, physical activity is combined with education about eating healthy, lowering stress, and managing other risk factors for heart disease. Cardiac rehab programs also focus on motivational counseling and psychological support to help patients set goals — and to increase their confidence as they get back to everyday activities like work and hobbies.

At UCSF, the cardiac rehab team aims to create an individualized plan for each patient, based on their needs, abilities, and preferences. "It's not a one-size-fits-all exercise program, even though we try to work everybody up to 150 minutes of physical activity a week," says Dr. Alexis Beatty, a cardiologist and associate professor at UCSF. "There's a lot of different ways to get there. We always try to meet patients where they are — even if that means starting with 5 minutes of physical activity a day and working up to more."

#### 🍿 Strategy: Adapt to Meet Patients' Needs

Most cardiac rehab programs take place at health care facilities — like hospitals and rehab centers — which means patients have to travel to participate. As a result, people in rural areas and those facing barriers like a lack of transportation may not have access to cardiac rehab.

But research shows that virtual, home-based exercise programs can be just as effective as in-person ones. So the UCSF team developed a home-based cardiac rehab option that includes virtual meetings with an exercise physiologist, group exercise sessions, and health behavior counseling. The team adapted exercises so that patients could do them without special equipment like treadmills and gave patients resources to help them get active at home, including links to online exercise videos.

"You have to find what works for patients," Beatty says. "A lot of our older adult patients enjoy exercising to workout videos on YouTube — old Jane Fonda videos are a favorite!"

This virtual approach has proven to be effective in helping patients meet their cardiac rehab goals. Patients work closely with doctors and exercise physiologists to make sure home-based activities are safe for them and to learn how to do them correctly on their own.

#### 🥩 Impact: Lower Barriers for Older Adults

Research shows that cardiac rehab programs lower patients' risk of having another heart attack and help them feel better overall. Yet many patients with heart disease who could benefit from a cardiac rehab program don't enroll in one — which may be due to barriers like a lack of program availability and long travel distances. The UCSF cardiac rehab program's **flexible hybrid approach** helps address these barriers. Over 200 patients participate in the program each year, and about half are older adults.

The UCSF team also provides **education about using virtual options**, which may be especially helpful for older adults. "Some of our older adult patients aren't comfortable using technology," Beatty says. "But many benefit from in-person education and training on how to use virtual options — and it ends up working quite well for them after a while."

## Key Takeaway: Empowering Patients Helps Lead to Lasting Success

Beatty says the UCSF cardiac rehab program's success is due in part to its focus on meeting patients where they are and empowering them to set their own goals.

"We try to inspire patients to own their own change," Beatty says, "and to support them as they build healthy routines they can maintain in the long term."

#### Home

Many older adults spend much of their time at home for a variety of reasons. Being physically active at home can remove several barriers, like those related to bad weather or lack of transportation. Older adults can be physically active at home no matter the season, the weather, or the time of day. Any other people living in the household can provide support through motivation and encouragement or by joining older adults in physical activity. In addition to the familiarity of one's own physical space, there's a level of comfort associated with trying new physical activities in private (e.g., doing an online group fitness class, such as those offered by SilverSneakers® or the YMCA of the USA) instead of in a public group setting. The home also provides opportunities to add physical activity to daily routines, such as gardening, doing household chores, or helping care for grandchildren.





#### Community Preventive Services Task Force Recommendation on Home-Based Exercise Interventions

The Community Preventive Services Task Force (CPSTF) recommends home-based exercise interventions to improve physical fitness among adults age 65 years and older. These interventions provide guidance about how to be physically active and aim to motivate older adults to engage in physical activity. Home-based interventions can improve balance and muscular strength, power, and endurance and may help limit physical inactivity. Interventions may also encourage participants to walk — for errands, with a friend, or outdoors to promote aerobic fitness.

CPSTF recommends home-based interventions that include the following components:

- Specific exercises, initial instruction on routines, and limited or periodic supervision
- Exercise sessions 2 or more times per week
- Exercises targeting improvements in strength (e.g., muscle strength, muscle power, and muscle endurance), balance, or both (i.e., multimodal)
- Low-cost equipment for exercises (e.g., hand weights, mats, towels) or exercises that make use of resources already in the home (e.g., chairs)

Learn more: <u>https://www.thecommunityguide.org/findings/physical-activity-home-based-exercise-interventions-adults-65-years-older.html</u>

#### Home and Community Combined

While the home is an easily accessible setting for getting active, the addition of a community-based component provides more opportunities to increase physical activity. This combined setting includes community-based organizations and facilities like local community centers, which provide information, guidance, and encouragement to engage in activity both at the community center location and at home. Many group-based physical activity programs take place in community settings such as recreation or fitness centers, senior centers, and faith-based organizations and are led by trained volunteers, community health workers, or physical activity or other health professionals who can support and encourage participants. The additional accountability of participating in group-based activity at a community-based organization, as well as the social engagement and connection, may contribute to the effectiveness of using this combined home and community setting to increase physical activity.

#### Home and Health Care Combined

Encouraging activity in both home-based and health care settings can reinforce physical activity behaviors among older adults. The combination of these settings allows programming from the clinic to be translated to the home and creates opportunities for program staff to provide additional at-home support during or after a health care-based program. This can make it easier for older adults to practice new physical activity behaviors on their own and incorporate new habits into their lifestyle while still receiving ongoing support. Such an approach can provide a transition between a structured, supervised program where participants "graduate" to continued physical activity at home.



# Walk with a Doc

Bringing Communities Together Through Movement and Conversation

#### Who? Walk with a Doc

What? A doctor-led walking group that combines movement and conversation to help people of all ages take steps toward a healthier lifestyle.

Where can I learn more? walkwithadoc.org

Back in 2005, cardiologist David Sabgir invited his patients to go for a walk with him at a local park in Columbus, Ohio. To his surprise, more than 100 people showed up — and **Walk with a Doc** was born.

Today, Walk with a Doc helps people across the nation take steps toward a healthier lifestyle — both literally and figuratively. True to its name, the program offers free doctor-led walking groups to give people of all backgrounds, ages, and abilities a safe, accessible, and fun way to get active. And doctors kick off each event by discussing a health topic, empowering participants to make informed decisions about their health.

Walk with a Doc also promotes conversation and camaraderie. The walks give participants an opportunity to socialize with each other and with a doctor — who they can also talk to about their health. "There's no doubt that our walking groups provide health benefits," says Program Manager Bryan Romey. "But social connection is really the glue that makes the program work and keeps people coming back." This kind of social connection can be especially important for older adults, who may be dealing with isolation and loneliness.



#### 🇰 Strategy: Prioritize Accessibility

Walk with a Doc is rooted in the core belief that, "at any age and any ability level, the simple act of walking and rolling has the power to change lives." So the program's staff and volunteers take special care to make sure all Walk with a Doc events are accessible.

"We want people with wheelchairs and walkers to attend the walks," says Romey. That's why the program provides participating doctors with guidance on how to ensure walks are accessible for as many people as possible, including older adults — like by choosing routes with paved walkways.

Romey also emphasizes that the program offers another type of accessibility altogether: access to doctors outside of a clinical setting. He says that for many people, the opportunity to get to know their doctor and ask questions in a relaxed environment is a primary motivator for regular participation in walks.

#### 🥩 Impact: More Movement, Connection, and Knowledge

Today, Walk with a Doc has more than **500 chapters** worldwide, including in **46 states**. Each year, Walk with a Doc hosts more than **8,000** walks in rural, urban, and suburban communities — and more than **120,000** people participate.

In 2017, a study on Walk with a Doc found that:

- 40 percent of Walk with a Doc participants reported meeting the recommendation of 150 minutes of physical activity per week (compared to the national average of 23 percent)
- **71 percent** of participants reported getting **more exercise** after starting Walk with a Doc
- 90 percent of participants reported feeling more educated about their health after starting Walk with a Doc



#### Key Takeaway: Keeping It Simple Is Key to Success

Rachael Habash, Walk with a Doc's Chief Operating Officer, says that Walk with a Doc's success comes down to staying focused on a simple, clear goal: bringing people together to take steps toward a healthier lifestyle.

"Walk with a Doc offers opportunities for movement, social connection, health education, and the benefits of being in nature," Habash explains. "The idea is keeping it simple for the sake of sustainability."

# Everyone Has a Role to Play in Helping Older Adults Be Physically Active

Many people across different sectors have a role to play in supporting older adults with their efforts to do more physical activity. The actions and opportunities listed below apply across sectors, including education; government; health care; housing; land use and community design; nonprofit; parks, recreation, and green space; public health; sports and fitness; and transportation.

**Professionals working with older adults one-on-one or in small-group settings** are in key positions to support and encourage them to increase their physical activity levels through direct interactions and services.

Professionals working with older adults can:

- Help them set self-selected physical activity goals, monitor their progress, use problem-solving to
  overcome barriers to physical activity, and build social support
- Consider individual factors, social and environmental factors, and cultural factors when providing tailored physical activity guidance
- Help older adults transition from programs or care within the health care setting to community programs by providing referrals to exercise and health professionals or programs and resources that fit their needs
- Provide guidance and recommendations to help older adults engage in more physical activity, such as through active transportation and leisure-time physical activity
- Use Move Your Way® resources to communicate the benefits of physical activity to older adults

Examples: exercise and health professionals; clinicians; gerontologists

**Organizations** are uniquely positioned to create conditions for older adults to participate in physical activity through programming and interactions at various facilities and locations.

Organizations can:

- Give support and guidance to create safe and effective supervised or unsupervised physical activity programs
- Promote the benefits of and access to physical activity opportunities for older adults
- Provide programs that create enjoyable physical activity opportunities and reduce barriers to participation (e.g., cost, transportation) for older adults
- Regularly assess program reach and work to increase participation and reduce attrition
- Review, plan, and implement programs with an equity lens to ensure they are inclusive and welcoming to older adults of all backgrounds and abilities

Examples: community, senior, or Tribal centers; health and fitness centers; cardiac rehabilitation facilities; hospital lifestyle and wellness centers; parks and recreation departments; faith-based institutions; senior living residences

**Community** includes the design and atmosphere of public spaces that people can use for physical activity, such as active transportation and public transit infrastructure; parks, greenways, and trails; and other community design interventions.

Built environment professionals can:

- Collaborate with academic institutions or public health organizations to evaluate community design policies, plans, and projects
- Consider both subjective (e.g., perceptions of safety from traffic or crime) and objective (e.g., street intersections per square mile) measures when making improvements to the built environment
- Create or enhance public transportation opportunities that are accessible to older adults with mobility, income, and other limitations
- Encourage community engagement by including input from older adult community members when planning activities (e.g., needs assessments that identify safety concerns and other physical activity needs and preferences in communities)
- Make communities more walkable and accessible to people using mobility devices (e.g., wheelchairs, walkers, canes) by supporting policies, plans, and projects to increase physical activity and create or enhance activity-friendly routes to everyday destinations
- Use resources from Active People, Healthy Nation<sup>sm</sup> to create more active communities

Examples: civic associations; housing authorities; those involved in public works, urban planning, parks and recreation, transportation, and economic development



**Policymakers and decision-makers** are responsible for creating laws, rules, regulations, codes, and funding at various levels of government; corporate policies; and institutional rules and policies. These can all support and promote more physical activity for older adults.

Policymakers and decision-makers can:

- Consider physical activity and the specific needs or circumstances of older adults when designing communities and developing policies, plans, and projects that reach all communities including racial and ethnic minority communities with few safe spaces for physical activity (e.g., zoning and land-use ordinances and subdivision guidelines; comprehensive [or master] plans; transportation and transit policies; Complete Streets policies; Safe Streets and Roads for All policies and programs; roadway design changes; shared use agreements; Vision Zero; and recreation and open space plans, policies, and projects)
- Incorporate physical activity assessment, prescription, and referral in health care delivery and across the continuum of patient care through electronic health records (e.g., physical activity as a vital sign)
- Establish state and local policies, plans, and projects that increase access to culturally proficient and language-accessible health care including physical activity counseling and outreach campaigns that support underserved communities
- Expand insurance coverage for physical activity counseling at clinician visits and referrals for community-based services including evidence-based programs and physical activity counseling from qualified exercise and health professionals
- Expand insurance coverage for recurring wellness assessments of older adults' medical and mobility needs and for ongoing interventions that support improvements in physical activity, activities of daily living, and instrumental activities of daily living
- Leverage and promote the economic benefits when communities are designed with physical activity needs of older adults in mind
- Use national surveillance data to identify disproportionately affected populations of older adults who may need more support to be physically active — and track population-level physical activity data through Healthy People physical activity objectives (including by race, ethnicity, sex, and socioeconomic group)

Examples: local and state government officials; Tribal leaders; public facility management, including schools and parks; health system administrators; health insurance companies

# Conclusion

It's never too late to start being physically active and to achieve the benefits of an active lifestyle. Moving more and sitting less is important for individuals of all ages. Especially for older adults, being physically active provides a range of benefits, such as improved quality of life, reduced risk and progression of chronic diseases, and increased functional ability — which can support independent living. Currently, less than 15 percent of older adults meet the recommendations in the Physical Activity Guidelines for Americans. This low rate of physical activity among older adults represents a significant physical, mental, social, and economic burden to individuals and families, their communities, and the health care system. It's important to remember that many activities can "count" as physical activity and provide tremendous benefits — whether they're structured exercise programs or daily tasks such as walking to the post office. Encouraging older adults to start slow and gradually increase physical activity can help build confidence, motivation, and a regular routine. Older adults can be physically active in a variety of settings — including the community, health care institutions, and at home — and people working across sectors can help older adults increase their physical activity levels.

This report outlines individual and group-based interventions and population-level policy, systems, and environmental strategies that can positively affect older adults and the entire community by supporting more physical activity. Measuring the effectiveness of strategies and interventions is critical to continually building and refining the list of "what works" to get older adults moving. The key is for policymakers; exercise and health professionals; clinicians; gerontologists; built environment professionals; local, state, territorial, and Tribal leaders; and others working with older adults to partner with one another to plan and implement strategies for connecting older adults where they live to destinations where they can access safe opportunities to be physically active — as well as motivate them to engage in physical activity. Together, we can all help older adults be physically active in a variety of settings and connect them to programs, places, and environments where being physically active is the easy and enjoyable choice.



# Glossary

### **Audiences Used in This Report**

- Built environment professionals include city, regional, state, and federal staff as well as privatesector professionals — in transportation including transit, planning and design, architecture, landscape architecture, engineering, public works, construction and maintenance, housing, parks and recreation, arts and culture, and economic and land development. They also include privatesector lenders, developers, and real estate professionals as well as people in related disciplines.
- **Clinicians** are individuals who provide medical care and treatment (e.g., physicians, geriatricians, physical therapists, occupational therapists, physician assistants, nurse practitioners, clinical nurse specialists, nurses, physiotherapists, respiratory therapists, recreation therapists). Clinicians that frequently work with older adults include:
  - Geriatricians physicians who have specialized training in the treatment of older adults.
  - Occupational therapists clinicians who help people across the lifespan do the things they want and need to do through the therapeutic use of daily activities (occupations). Occupational therapists help people promote health and prevent or live better with injury, illness, or disability.
  - **Physical therapists** clinicians who have specialized training in human movement. Physical therapists provide hands-on care, patient education, and prescribed movement to help people manage pain and chronic conditions, improve physical function and fitness, and improve quality of life.
- **Exercise professionals** are individuals who facilitate and lead physical activity programs in community-based settings such as health and fitness facilities, recreation centers, and senior centers (e.g., exercise physiologists, personal trainers, fitness and yoga instructors, certified exercise professionals, trained recreation leaders, program managers).
- **Gerontologists** are individuals who study the physical, cognitive, social, emotional, psychological, and societal effects of aging and its impact on the population.
- Health professionals are individuals who deliver health programs and services that are distinct from medical care (e.g., public health professionals, health and wellness specialists, health coaches, community health workers, health educators, aging services professionals, peer support specialists).

Active transportation refers to modes of transportation that are dependent on some amount of physical activity — such as walking, wheelchair rolling, bicycling, and using transit (which tends to require significantly more activity than riding in a car, for example).

**Aerobic physical activity** is activity in which the body's large muscles move rhythmically for a sustained period of time. Aerobic activity — also called aerobic endurance, aerobic capacity, or cardio activity — improves cardiorespiratory fitness. Examples include brisk walking, running, swimming, and bicycling.

Aerobic activity has 4 components:

- Frequency, or how often someone does the activity each week
- Intensity, or how hard the activity is. Physical activity can be characterized as light (equivalent to a leisurely walk), moderate (equivalent to brisk walking), or vigorous (equivalent to running or jogging).
- Time, or the duration of the activity. This can be the length of any 1 session (e.g., 20 minutes) or the overall length of time (e.g., 8-week program).
- Type, or the mode of the activity such as walking or running

**Balance** is a component of physical fitness that involves maintaining the body's equilibrium while stationary or moving.

**Balance training** refers to static or dynamic exercises that are designed to improve individuals' ability to resist forces within or outside the body that cause falls while a person is stationary or moving. Walking backward, standing on 1 leg, or using a wobble board are examples of balance-training activities.

**Built environment** is the physical infrastructure that people design and construct. It includes homes and other buildings and their surrounding access and landscaping; canals and man-made waterways; walkways, alleys, streets, roadways, highways, bridges, and associated facilities such as shoulders, curbs, sidewalks, crosswalks, lights, and signals; transit systems; plazas, parks, and larger open and green spaces, including greenway trails and multi-use pathways; residential, educational, business, and light and heavy industrial development; and mixed-use areas such as traditional downtowns and urban districts.

**Exercise** is a form of physical activity that is planned, structured, repetitive, and performed with the goal of improving or maintaining health or fitness. All exercise is physical activity, but not all physical activity is exercise.

**Intensity** refers to how much work someone is doing or the magnitude of the effort required to perform an activity or exercise. Intensity can be expressed either in absolute or relative terms. Because older adults expend more energy than younger adults for the same task — such as walking at a certain speed — and because aerobic capacity declines with age, relative intensity is a better guide for older adults than absolute intensity. Certain activities that are considered light-intensity for younger adults, such as some types of yoga or tai chi, may be moderate- or vigorous-intensity for older adults when measured by relative intensity.

Absolute intensity is determined by the rate of work being performed and does not consider the
physiologic capacity of the individual. For aerobic activity, absolute intensity typically is expressed
as the rate of energy expenditure — for example, milliliters per kilogram of body weight per
minute of oxygen being consumed, kilocalories per minute, or METs (see MET definition below).
For muscle-strengthening activities, intensity is often expressed as the amount of weight lifted
or moved.

- Light-intensity activity is non-sedentary waking behavior that requires less than 3.0 METs. Examples include walking at a slow or leisurely pace (2 mph or less), cooking, washing dishes, or light household chores.
- Moderate-intensity activity requires 3.0 to 5.9 METs. Examples include walking briskly or with purpose (2.5 to 4 mph), mopping or vacuuming, or raking the yard.
- Vigorous-intensity activity requires 6.0 or more METs. Examples include walking very fast (4.5 to 5 mph), running, carrying heavy groceries or other loads up the stairs, shoveling snow, or participating in a strenuous fitness class.
- Relative intensity takes into account or adjusts for a person's cardiorespiratory fitness. For aerobic exercise, relative intensity is expressed as a percentage of someone's aerobic capacity (VO2 max or VO2 reserve) or as a percentage of their measured or estimated maximum heart rate or heart rate reserve. It also can be expressed as an index of how hard the person feels they're exercising (for example, on a scale of 0 to 10).

**Metabolic equivalent of task (MET)** refers to the energy expenditure required to carry out a specific activity, and 1 MET is the rate of energy expenditure while sitting at rest. This generally corresponds to an oxygen uptake of 3.5 milliliters per kilogram of body weight per minute. Physical activities frequently are classified by their intensity using the MET value as a reference.

**Multicomponent physical activity** is physical activity that includes more than 1 type of physical activity — such as aerobic, muscle-strengthening, and balance training. Multicomponent physical activity programs may also include gait, coordination, and physical function training. Examples of multicomponent activities include ballroom dancing and water aerobics.

**Muscle-strengthening activity (strength training, resistance training, or muscular strength and endurance exercise)** is physical activity, including exercise, that increases skeletal muscle strength, power, endurance, and mass. Muscle-strengthening activity has 4 components:

- Frequency, or how often someone does the activity each week
- Intensity, or how hard the activity is
- Time, or the number of repetitions of an activity (e.g., 3 sets of 12 repetitions each)
- Type, or the format or mode of the activity like doing a push-up or lifting a weight

**Older adults** (for the purposes of this report) are people age 65 years and older. This age range is consistent with the definition of older adults used in the Physical Activity Guidelines for Americans and for Healthy People 2030 objectives. In the United States, age 65 is the threshold for Medicare eligibility.

**Physical activity** is any bodily movement produced by the contraction of skeletal muscle that increases energy expenditure above a basal level. In the *Guidelines*, physical activity generally refers to the subset of physical activity that enhances health.

# Appendix: Federally Supported Physical Activity Initiatives and Resources for Older Adults

The initiatives and resources included below are managed or funded by the federal government. Nonfederally supported evidence-based initiatives and resources may also help older adults increase physical activity levels.

## U.S. Department of Health and Human Services (HHS) Administration for Community Living (ACL)

- Arthritis Foundation Exercise Program is a recreational group exercise program that includes a
  variety of exercises that can be performed while sitting, standing, or lying on the floor. Programs
  offer multiple components to help reduce pain and stiffness and to maintain or improve mobility,
  muscle strength, and functional ability. Endurance-building routines, relaxation exercises and health
  education topics are also included. (https://aeawave.org/arthritis)
- Bingocize® is a program that combines a bingo-like game with exercise and health education. The unique addition of bingo addresses many of the barriers to older adults' participation because the game is fun, familiar, and done in a group setting. The program has been shown to increase older adults' functional fitness, health knowledge, and social engagement in a variety of settings. A mobile app version is also available. (https://www.wku.edu/bingocize/)
- Enhance®Fitness is a low-cost, evidence-based group falls prevention and physical activity program developed specifically for older adults. The exercises have been packaged into a formal regimen focusing on 4 key areas important to the health and fitness of mature participants: low-impact cardiovascular activity, dynamic/static balance work, strength training, and stretching. (https:// projectenhance.org/)
- Fit & Strong! is an evidence-based physical activity/behavior change intervention that has been successfully implemented in multiple community-based settings. Participants are older adults who have lower-extremity joint pain and stiffness related to osteoarthritis. Fit & Strong! blends a multiple-component exercise program with group problem-solving/education using a curriculum designed to facilitate arthritis symptom management, confidence in one's ability to exercise safely with arthritis, and commitment to lifestyle change. (https://www.fitandstrong.org/)
- Geri-Fit<sup>®</sup> is an evidence-based health promotion and chronic disease self-management support
  program. Designed exclusively for older adults, Geri-Fit helps rebuild strength that's been lost
  through the aging process. The progressive resistance strength training program uses bodybuilding
  techniques to increase strength. It also incorporates range-of-motion exercises, stability and balance
  training, cardiovascular activity for heart health, and gait exercises to help improve walking. (https://
  www.gerifit.com/)
- Healthy Steps in Motion (HSIM) is an exercise program designed for people of all fitness levels. There are 3 levels of exercises, so participants can continue HSIM as long as they like. HSIM strives to reduce the risk of falling by building body strength, increasing flexibility, and improving balance. HSIM can be offered at senior centers, older adult living centers, recreation centers, hospitals, YMCAs/YWCAs, and other locations. (https://www.aging.pa.gov/aging-services/health-wellness/ HealthyStepsinMotion/Pages/default.aspx)

- A Matter of Balance is a structured group intervention that emphasizes practical strategies to reduce the fear of falling and increase activity levels for older adults. Participants learn to view falls and fear of falling as controllable, set realistic goals to increase activity, change their environment to reduce fall risk factors, and exercise to increase strength and balance. (https://www.mainehealth.org/healthy-communities/healthy-aging/matter-of-balance)
- Moving For Better Balance is a group program designed to improve strength, mobility, flexibility, and balance for enhanced overall physical health and better functioning in daily activities. Participation in the program may also result in better mental health, reduced stress, improved memory and cognition, and increased self-esteem. The program, based on the principles of tai chi, teaches 8 movements modified especially for falls prevention. (https://www.ymca.org/what-we-do/healthy-living/fitness/older-adults/better-balance)
- On the Move is a group-based exercise program for older adults designed to target key principles of the biomechanics and motor control of walking. The warm-up and cooldown contain gentle range-of-motion exercises and stretches for the legs and trunk. The program's unique stepping and walking patterns promote the timing and coordination of stepping and are integrated with the phases of the gait cycle. (https://www.onthemove.pitt.edu/)
- The Otago Exercise Program is a series of 17 strength and balance exercises facilitated by a physical therapist or physical therapy assistant in the home or an outpatient or community setting. The program has been shown to reduce falls by between 35 and 40 percent for frail older adults. (https://www.med.unc.edu/aging/cgwep/courses/exercise-program/)
- Stay Active and Independent for Life (SAIL) is a strength, balance, and fitness program for adults age 65 years and older. Performing exercises that improve strength, balance, and fitness is the single most important step that adults can take to stay active and reduce their chance of falling. If done regularly, the entire curriculum of activities in the SAIL program can help improve strength and balance. (https://www.sailfitness.org/)
- Tai Chi for Arthritis and Fall Prevention helps people with arthritis improve their muscular strength, flexibility, balance, stamina, and more. (<u>https://taichiforhealthinstitute.org/programs/</u> <u>tai-chi-for-fall-prevention/</u>)
- Tai Chi Prime classes feature instruction in tai chi and qi gong basics, home practice coaching, DVDs for home practice, and exercises to embed into activities of daily living. (<u>https://</u> <u>taichihealth.com/tai-chi-prime-overview/</u>)
- Tai Ji Quan: Moving for Better Balance<sup>™</sup> is an evidence-based falls prevention program. Each session consists of warm-up exercises; core practices, which include a mix of practice of forms, variations of forms, and mini-therapeutic movements; and brief cooldown exercises. (<u>https://tjqmbb.org/</u>)
- Walk With Ease is a community-based physical activity and self-management education program. While walking is the central activity, Walk With Ease is a multicomponent program that also includes health education, stretching and strengthening exercises, and motivational strategies. (https://www.arthritis.org/health-wellness/healthy-living/physical-activity/walking/ walk-with-ease)

#### Agency for Healthcare Research and Quality (AHRQ)

The TAKEHeart Initiative is designed to increase patient participation in cardiac rehabilitation after cardiovascular events like heart attacks, heart failure, angioplasty, and heart surgery. (<u>https://takeheart.ahrq.gov/</u>)

#### Centers for Disease Control and Prevention (CDC)

■ Active People, Healthy Nation<sup>SM</sup> is a CDC-led initiative to help 27 million Americans become more physically active by 2027. Resources include evidence-based strategies to increase physical activity (including through community design), information on how multiple sectors can engage, and facts on the benefits of physical activity. (https://www.cdc.gov/physicalactivity/activepeoplehealthynation/ index.html)

Specific resources highlighting older adults include:

- Information on how much physical activity older adults need (https://www.cdc.gov/physicalactivity/basics/older\_adults/index.htm)
- Ways older adults can include physical activity in their daily life (https://www.cdc.gov/physicalactivity/basics/adding-pa/activities-olderadults.htm)
- Information on levels of physical activity among older adults (<u>https://www.cdc.gov/physicalactivity/inactivity-among-adults-50plus/index.html</u>)
- A fact sheet on older adult physical activity levels (<u>https://www.cdc.gov/physicalactivity/inactivity-among-adults-50plus/modules/Adults\_need\_more\_PA\_factsheet\_March2022\_508.pdf</u>)
- A podcast on the importance of physical activity for older adults (<u>https://tools.cdc.gov/</u> medialibrary/index.aspx?deliveryName=FCP\_19\_DM20977\_USCDC\_944#/media/id/405188)
- Mall Walking: A Program Resource Guide: Information about mall walking programs or indoor walking programs in mall-like settings that can address many barriers facing older adults. (<u>https://www.cdc.gov/nccdphp/dnpao/docs/uwmallwalkingguideweb508tagged.pdf</u>)
- Arthritis-Appropriate, Evidence-Based Interventions (AAEBI) are community-based programs that the Osteoarthritis Action Alliance (OAAA) identifies during a CDC-funded review. The most recent list of AAEBI programs includes several physical activity interventions, including Enhance®Fitness. (<u>https://oaaction.unc.edu/aaebi</u>)
- Disability & Health Resources for Facilitating Inclusion and Overcoming Barriers assist in creating and using inclusion strategies to improve the health, well-being, and participation of people with disabilities in all aspects of life. (<u>https://www.cdc.gov/ncbddd/disabilityandhealth/disability-resources.</u> <u>html</u>)
- The Guide to Community Preventive Services (The Community Guide) is a collection of evidencebased findings of the Community Preventive Services Task Force (CPSTF). It's a resource to help health professionals and others select interventions to improve health and prevent disease in their states, communities, community organizations, businesses, health care organizations, or schools. (https://www. thecommunityguide.org/pages/about-community-guide.html)

- Increasing Physical Activity Among Adults with Disabilities features resources for doctors and other health professionals that outline how to increase physical activity among adults with disabilities. (<u>https://www.cdc.gov/ncbddd/disabilityandhealth/pa.html</u>)
  - Infographic (<u>https://www.cdc.gov/ncbddd/disabilityandhealth/documents/disability-pa-infographic.pdf</u>)
- MyMobility Plan is a set of resources supported by CDC that provides older adults with information, guidance, and tips on how to stay safe, mobile, and independent as they age. The mobility planning tool has 3 parts: tips to manage health and mobility, a home safety checklist for falls prevention, and a plan to stay mobile in the community. (https://www.cdc.gov/transportationsafety/older\_adult\_drivers/mymobility/index.html)
- The National Diabetes Prevention Program (National DPP) is the CDC-recognized lifestyle behavior change program focusing on increasing physical activity and heathy eating among people with prediabetes to reduce their risk of eventually developing diabetes. (https://www.cdc.gov/diabetes/prevention/lcp-details.html)
- The Older Adult Fall Prevention webpages include a collection of effective fall prevention interventions to help public health practitioners, senior service providers, clinicians, and others who want to address falls among older adults in their community. The webpages also provide data, resources, and publications on fall prevention. (https://www.cdc.gov/falls/index.html)
  - Compendium of Effective Fall Interventions: What Works for Community-Dwelling Older Adults highlights specific interventions for which there is published evidence of the ability to reduce falls among community-dwelling older adults. The 4th edition of the Compendium describes 34 single interventions (17 exercise interventions, 5 home modification interventions, and 12 clinical interventions) and 16 multifaceted interventions (addressing multiple risk factors). (https://www.cdc.gov/falls/pdf/Steadi\_Compendium\_2023\_508.pdf)
  - The webpages also include Preventing Falls: A Guide to Implementing Effective Community-Based Fall Prevention Programs, a related "how-to" guide designed for community-based organizations that are interested in planning, developing, implementing, and evaluating their own evidence-based falls prevention programs. (https://www.cdc.gov/falls/programs/community\_prevention.html)
- Physical Activity for Arthritis webpages provide resources and guidance on physical activity for individuals with arthritis. (<u>https://www.cdc.gov/arthritis/basics/physical-activity/index.html</u>)
- The Still Going Strong Campaign speaks directly to older adults and their caregivers to raise awareness about preventable injuries among older adults. (<u>https://www.cdc.gov/stillgoingstrong/</u> index.html)

#### Indian Health Service (IHS)

• The Diabetes Standards of Care and Resources for Clinicians and Educators are intended to provide guidance to clinicians and educators as they care for American Indian and Alaska Native people who have or are at risk for type 2 diabetes:

- Physical Activity Standard of Care (<u>https://www.ihs.gov/diabetes/clinician-resources/soc/physical-activity1/</u>)
- Physical Activity Education (<u>https://www.ihs.gov/sdpi/sdpi-community-directed/diabetes-best-practices/physical-activity-education/</u>)
- Educator and Patient Resources from the IHS Division of Diabetes Treatment and Prevention (DDTP) are culturally relevant, easy-to-read education materials for patients, educators, and providers.
  - Being Active Is Traditional shares fun ways to be more active. (<u>https://www.ihs.gov/diabetes/</u> education-materials-and-resources/index.cfm?module=productDetails&productID=2491)
  - How to Get Started Walking encourages people to start walking for exercise and wellness. (<u>https://www.ihs.gov/diabetes/education-materials-and-resources/index.</u> <u>cfm?module=productDetails&productID=334</u>)
  - How to Walk Farther and Faster promotes increased walking. (<u>https://www.ihs.gov/diabetes/</u> education-materials-and-resources/index.cfm?module=productDetails&productID=335)
  - The Household Circuit Activity Program describes how individuals can increase daily physical activity at home by combining a number of household and/or yard chores in a defined period of time or circuit. (https://www.ihs.gov/diabetes/education-materials-and-resources/index. cfm?module=productDetails&productID=2378)
- The Physical Activity Kit (PAK) is a culturally appropriate toolkit based on best and promising practices to increase physical activity among all ages across the lifespan. The PAK consists of structured activities that Head Starts, child care centers, schools, senior centers, and youth organizations can easily implement with minimal equipment. The toolkit supports national efforts to get people of all ages moving including the Just Move It and Move Your Way® campaigns. (https://www.ihs.gov/hpdp/pak/)
  - **PAK Book 7: Older Adults** contains information on how much physical activity older adults need, information about types of physical activity, and illustrations of a mix of physical activity movements.

#### National Institutes of Health (NIH)

The National Institute on Aging (NIA) has resources on exercise and physical activity for healthy aging. (<u>https://www.nia.nih.gov/health/topics/exercise-and-physical-activity</u>)

#### Office of Disease Prevention and Health Promotion (ODPHP)

The Physical Activity Guidelines for Americans is an essential resource for health professionals and policymakers. It includes recommendations for Americans age 3 years and older — including people at increased risk of chronic disease — and provides evidence-based advice on how physical activity can help promote health and reduce the risk of chronic disease. (<u>https://health.gov/our-work/nutrition-physical-activity/physical-activity-guidelines/current-guidelines</u>)

- Move Your Way<sup>®</sup> is a campaign that provides free tools in both English and Spanish to promote the Physical Activity Guidelines for Americans. The campaign encourages Americans to get the physical activity they need to get and stay healthy by increasing awareness, knowledge, and self-efficacy. Campaign resources include interactive tools, videos, posters, fact sheets, and social media messages for audiences of all ages, including older adults. (<u>https://health.gov/moveyourway</u>) Specific resources highlighting older adults include:
  - Information on how much physical activity older adults need and why physical activity is key for healthy aging (<u>https://health.gov/sites/default/files/2021-02/PAG\_MYW\_FactSheet\_</u> <u>OlderAdults\_508c.pdf</u>)
  - Information on the different types of physical activity older adults need and how they can get a mix of activity types (<u>https://health.gov/sites/default/files/2021-07/PAG\_MYW\_FactSheet\_</u> <u>OlderAdults\_07-08\_508c.pdf</u>)
  - A story illustrating how 2 older adults eat healthy and find safe ways to get active (https://health.gov/moveyourway/stories/john-patty)
  - A planning tool to help people build a personalized weekly activity plan with tips for fitting activity into their daily routines (<u>https://health.gov/moveyourway/activity-planner</u>)
- Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. It has a physical activity topic area, which includes objectives used to track different populations' progress toward meeting the recommendations in the Physical Activity Guidelines for Americans as well as other physical activity areas. (https://healthypeople.gov)

#### Office of the Surgeon General (OSG)

Step It Up! The Surgeon General's Call to Action to Promote Walking and Walkable Communities is intended to increase walking across the United States by calling for improved access to safe and convenient places to walk and wheelchair roll, as well as for a culture that supports these activities for people of all ages and abilities. This publication presents 5 goals and supporting implementation strategies that are grounded in scientific and practice-based evidence. These goals call for action by multiple sectors of society, as well as families and individuals.

(https://www.surgeongeneral.gov/library/calls/walking-and-walkable-communities/index.html)

#### **Environmental Protection Agency (EPA)**

- Healthy Places for Healthy People engages with community leaders and health care partners to create walkable, healthy, and economically vibrant communities that can improve health, protect the environment, and support economic growth. One key focus of the program is creating physical activity programs and supporting sidewalks, bike paths, trails, and parks in the community to promote active living. (https://www.epa.gov/smartgrowth/healthy-places-healthy-people)
- The National Walkability Index is a nationwide geographic data resource that ranks block groups according to their relative walkability. The national dataset includes walkability scores for all block groups as well as the underlying attributes used to rank the block groups. (https://www.epa.gov/smartgrowth/smart-location-mapping#walkability)

### National Park Service (NPS)

Healthy Parks Healthy People is a program that connects people to parks through health promotion, fosters society's understanding of and appreciation for the life-sustaining role of parks, and creates the next generation of park stewards. The program addresses health promotion in parks and communities at local, state, national, and international levels through 5 main programmatic areas — including healthy recreation. (https://www.nps.gov/orgs/1078/index.htm#:~:text=Healthy%20Parks%20Healthy%20 People%20works,and%20sustainability%20of%20the%20planet)

## U.S. Department of Agriculture (USDA)

- The Forest Service Accessibility Resources promote trail use and outdoor recreation opportunities accessible to older adults with mobility limitations and people with disabilities. "Accessibility" defines a facility in compliance with accessibility guidelines or standards when it was built or altered. (https:// www.fs.usda.gov/managing-land/national-forests-grasslands/accessibility/resources)
  - These resources include an Interactive Visitor Map. (https://www.fs.usda.gov/ivm/)
- The SNAP-Ed Connection webpage hosts a library of physical activity resources for older adults. (https://snaped.fns.usda.gov/library/materials?keywords=physical%20activity&sort\_by=search\_api\_relevance&lib%5B0%5D=audience%3A19)

## U.S. Department of Transportation (DOT)

- The Federal Highway Administration's Bicycle and Pedestrian Program provides resources to help
  promote bicycle and pedestrian transportation use, safety, and accessibility. These resources
  include a listing of State Bicycle and Pedestrian Coordinators, information on funding sources, and
  bicycle- and pedestrian-related legislation. (https://www.fhwa.dot.gov/environment/bicycle\_pedestrian/
  index.cfm)
  - Pedestrian and Bicycle Funding Opportunities: U.S. Department of Transportation Transit, Safety, and Highway Funds (<u>https://www.fhwa.dot.gov/environment/bicycle\_pedestrian/funding/funding\_opportunities.pdf</u>)
- The Federal Highway Administration's Complete Streets website is focused on helping people plan, develop, and operate equitable streets and networks that prioritize safety, comfort, and connectivity to destinations for everyone who uses the street network. (<u>https://highways.dot.gov/complete-streets</u>)
  - Moving to a Complete Streets Design Model: A Report to Congress on Opportunities and Challenges (<u>https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-03/Complete%20Streets%20Report%20</u> <u>to%20Congress.pdf</u>)
- The Federal Highway Administration's Small Town and Rural Multimodal Networks guide is a design resource and idea book to help small towns and rural communities support safe, accessible, comfortable, and active travel for people of all ages and abilities. (<u>https://www.fhwa.dot.gov/</u> <u>environment/bicycle\_pedestrian/publications/small\_towns/page00.cfm</u>)

### U.S. Department of Veterans Affairs (VA)

- Gerofit is an exercise program that promotes health and wellness for Veterans. Participants receive a personalized exercise prescription, and trained exercise staff such as physiologists, nurses, or physical therapists provide guidance for carrying out the exercise program. (https://www.va.gov/GERIATRICS/pages/gerofit\_Home.asp)
- The MOVE! Weight Management Program is a weight management and health promotion program supported by the VA's National Center for Health Promotion and Disease Prevention (NCP) and designed to improve the lives of Veterans. The program helps Veterans maintain and lose weight by encouraging healthy eating and increased physical activity. (https://www.move.va.gov/)





Physical Activity Guidelines for Americans Midcourse Report: Implementation Strategies for Older Adults | 2023 U.S. Department of Health and Human Services

